Juniata
COLLEGE

2000-2001 CATALOG

Expect the Uncommon

Juniata College Catalog 2000-2001

Vision Statement

Juniata College is a learning community dedicated to the highest quality education in the liberal arts and sciences, thereby empowering our graduates to lead fulfilling and useful lives in a global setting.

Juniata College
Huntingdon, Pennsylvania 16652-2196
1-877-JUNIATA
Fax: (814) 641-3199

Enrollment:
1-877-JUNIATA or (814) 641-3420
Fax: (814) 641-3100

www.juniata.edu

Juniata College is an independent, privately supported, coeducational institution committed to providing a liberal arts education to qualified students regardless of sex, religion, race, color, national origin, ancestry, marital status, sexual orientation or disability. College policies comply with the requirements of Title VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and all other applicable federal, state and local statutes, regulations and guidelines. A complete affirmative action policy is available in the Office of Human Resources.

Catalog provisions are not to be regarded as an irrevocable contract between the student and Juniata College. While every attempt has been made to assure correct information, the College reserves the right to change any provisions or requirements when deemed appropriate.

TABLE OF CONTENTS

Correspondence Directory 2

College Calendar 4
College Quick Facts 5

Juniata's Educational Heritage 8
The College 8
The Campus 11

Academic Programs 17
The Curriculum 18
Pre-Professional Programs 22
Cooperative Programs 24
International Programs 27
Internships 32

Academic Planning, Policies and Records 36
Academic Planning 38
Academic Policies 42
Academic Records 46

Co-Curricular Life 52
The Co-Curricular Transcript 53
Community Service 53
Campus Activities 53
Athletics and Recreation 55
Residence Hall Life 56
Career Services 58
Standards of Student Conduct 60

Admission 63
Philosophy 64
Guidelines for Entering Freshmen 64
Guidelines for Transfer Students 66
Other Admission Programs 67
Non-Traditional Student Admission Programs 69

Student Finances 72
Student Financial Planning 73
Expenses 78

Courses of Instruction 84
Accounting, Business and Economics 86
Fine Arts 91
Biology 96
Chemistry 101
Cultural Analysis 105
Education 107
English, Communications and Theatre Arts 112
Environmental Science & Studies 118
Geology 121
History 125
Information Technology 131
International Studies 133
Mathematics and Computer Science 134
Music 140
Non-Departmental 143
Peace and Conflict Studies 144
Philosophy 147
Physics 150
Politics 154
Psychology 158
Religion 161
Sociology, Anthropology, Social Work and Criminal Justice 163
World Languages and Cultures 168

Directories 179
Board of Trustees 180
Faculty 181
Administration 185
Emeriti Board, Faculty and Administration 187
Staff and Departmental Assistants 189

Glossary of Acronyms 191
Index 192

(See each chapter for more detailed Table of Contents)

Correspondence Directory

For questions regarding:	Contact
Academic computing services	Deb Hissner, Director, End User Support Brumbaugh Science Center
Admission	Michelle Bartol, Dean of Enrollment Management William E. Swigart, Jr. Center
Athletics	Larry Bock, Athletic Director Kennedy Sports+Recreation Center
Academic support, tutoring	Sarah May Clarkson, Director of Academic Support Services Founders Hall
Alumni	Michelle Corby, Director of Alumni Development H.B. Brumbaugh Alumni House
Bookstore	Jeremy Santos, Bookstore Manager Ellis College Center
Student employment	Randy Rennell, Director of Student Financial Planning William E. Swigart, Jr. Center
Campus ministry	L. David Witkovsky, College Chaplain Tussey/Terrace
Campus programming, student organizations	Dawn Scialabba, Assistant Dean of Students/Director of Campus Activities Ellis College Center
Career services, internships	Darwin Kysor, Director of Career Services Ellis College Center
Counseling services	Jennifer Long Health and Wellness Center 1622 Moore Street
Courses and departments/programs	Department/Program Chairperson
Dining services	Dean Wuerfl, Director of Food Service Ellis College Center
Financial planning Manager and Director of Student	Randy Rennell, Director of Student Financial Planning William E. Swigart, Jr. Center
Grades, registration, transcripts	Athena Frederick, Registrar Founders Hall
Health services	Connie Peters, R.N. Health and Wellness Center 1622 Moore St.

Housing	Kathy Collins, Assistant Dean of Students/Director of Residential Life Ellis College Center
Library	John Mumford, College Librarian L. A. Beeghly Library
Students with special needs	Kris Clarkson, Dean of Students Founders Hall
Leave of absence	Kris Clarkson, Dean of Students Founders Hall
Orientation	Daniel Cook-Huffman, Assistant Dean of Students Founders Hall
Parking, ID cards, campus security	Rocco Panosetti, Head Security Officer Ellis College Center
Post office	Sue Glenny, Post Office Clerk Ellis College Center
Public relations	David Gildea, Director of External Relations and Marketing H. B. Brumbaugh Alumni House
Roommate concerns	Residence hall staff
Student life	Kris Clarkson, Dean of Students Founders Hall
Study abroad	JoAnn Wallace, Director of International Programs Ellis College Center
Tuition and fees	Phil Thompson, Controller 1931 Moore St.

Juniata College Academic Calendar

FALL SEMESTER

August	24	Thursday	*International Students Orientation
	26	Saturday	*Freshmen and Transfer Students Arrive
	27	Sunday	*Upperclass Students Arrive
	28	Monday	***Fall Semester Classes Begin***
Aug 28 - Sept. 5		Monday - Tuesday	***Drop/Add Period***
September	15 - 17	Friday - Sunday	***Family Weekend***
	18	Monday	Incomplete Work Due, Grades Due Sept. 22
October	13	Friday	Mid-Term Date, Mid-Term Notices Due in Registrar's Office by October 20
	14 - 17	Saturday - Tuesday	+Fall Recess
	18	Wednesday	Classes Resume
	20	Friday	***Course Withdrawal Deadline*** (Instructor's Permission Required After This Date)
	20 - 22	Friday - Sunday	***Homecoming***
Oct 30 - Nov 7		Monday - Tuesday	Junior/Senior Preregistration
November	7	Tuesday	**Senior P.O.E.s Due**
	9 - 17	Thursday - Friday	Freshmen/Sophomore Preregistration
	22 - 26	Wednesday - Sunday	+Thanksgiving Recess
	27	Monday	*Classes Resume
December	12	Tuesday	***Last Day of Classes, Final Course Withdrawal Deadline***
	13	Wednesday	Reading Day
	14 - 20	Thursday - Wednesday	**+Final Examinations**

SPRING SEMESTER

January	14	Sunday	*Students Return
	15	Monday	***Spring Semester Classes Begin***
	15 - 23	Monday - Tuesday	***Drop/Add Period***
February	5	Monday	Incomplete Work Due, Grades Due Feb. 9
March	2	Friday	Mid-Term Date, Mid-Term Notices Due in Registrar's Office by March 16
	3 - 11	Saturday - Sunday	+Spring Recess
	12	Monday	*Classes Resume
	16	Friday	Sophomore P.O.E.s Due
	19-27	Monday - Tuesday	Sophomore/Junior Preregistration
	27	Tuesday	**Freshmen Initial P.O.E.s & Transfer Students P.O.E.s Due**
	28	Wednesday	***Course Withdrawal Deadline*** (Instructor's Permission Required After This Date)
Mar 28 - April 5		Wednesday-Thursday	Freshmen Preregistration
	13	Friday	No Classes, Good Friday
	17	Tuesday	***Founders Day***
May	1	Tuesday	***Last Day of Classes, Final Course Withdrawal Deadline***
	1	Tuesday	***Spring Awards Convocation***
	2	Wednesday	Reading Day
	3 - 9	Thursday - Wednesday	***+Final Examinations***
	13	Sunday	***#Senior Commencement***
	18-21	Thursday - Sunday	***Alumni Weekend***

*On Sat. Aug 26, Residence Halls open at 9 a.m. On the day before classes begin for the spring semester, Residence Halls open at 1:00 p.m. and Dining Hall at 5:00 p.m.
+On the day after classes or exams end, the Dining Hall closes at 8:30 a.m. and the Residence Halls at 9:30 a.m.
#The Dining Hall closes at 1:00 p.m. and the Residence Halls at 4:00 p.m.

Juniata College Quick Facts

GENERAL	Location:	Huntingdon, PA
	Founded:	1876
	Status:	Independent, Private, Four-year coeducational
	Affiliation:	Church of the Brethren
	Motto:	"Veritas Liberat" - Truth Sets Free
	Team Name:	Eagles
	School Colors:	Blue and Gold
	Campus:	1167 Acres total; Main Campus - 110 Acres, 33 Buildings
	President:	Dr. Thomas R. Kepple Jr.
	Accreditation:	Middle States Assoc.; American Chemical Society: Council on Social Work Education; Pennsylvania State Board of Education
STUDENTS	Enrollment:	Fall 1999: 1268 total; 1239 FTE
	Characteristics:	56% Women; 97% Full-time; 6% International; 2.3% Domestic Minority
	Geographic Origin:	32 States and 21 Foreign Countries; 76% from Pa.
	Freshmen Profile:	# First-time Full-time Freshmen - 325. Average SAT: 1143; Average GPA: 3.63
	Athletics Affiliation:	NCAA Division III; Middle Atlantic States Collegiate Athletic Conference
FACULTY & STAFF	Faculty Size:	Fall 1999: 88.9 FTE; 86 Full-time, 23 Part-time
	Full-time Faculty:	91% hold Terminal Degree; 90% Tenured or Tenure-track; 30% Female
	Staff Size:	Total Employees (including faculty): 257 Full-time, 63 part-time
ACADEMIC PROGRAM	Calendar:	Semester; Limited Summer Session
	Degrees Offered:	Bachelor of Arts, Bachelor of Science
	# Designated POEs:	61
	Most Popular POEs:	Biology-17%; Education-13%; Econ/Business-9%; Pre-Health Prof- 8%; Envir Sci-6%
	Student/Faculty Ratio:	14 to 1
	Average Class Size:	Average Lecture: 21; Average Lab: 16; Average, all: 15
	Retention:	86% of Freshmen return 2nd year; 71% graduate in 6 yrs.
FACILITIES	Library Holdings:	Volumes: 208,000; Serial Titles: 3,500; Microform Titles: 200; Video/Audio Titles: 1,300; 10 Commercial On-Line Services; Access to Penn State Library
	Computers:	Campus-wide computer network with access in all dorm rooms; 225 computers and 8 computer labs for student use Cyber Café ("Cyber Connection") in the Student Center
	Special Facilities:	665-acre Raystown Environmental Studies Field Station; 316-acre Nature Preserve & Peace Chapel; Early Childhood Education Center; Juniata College Museum of Art; Ceramics studio & Anagama kiln
	Residence Halls:	11 Residence Halls; Capacity - 1104 87% of Degree-seeking students live on-campus
FINANCES	Cost:	1999-00 Tuition: $18,030;Room: $2,660;Board: $2,450; Fees: $420. TOTAL - $23,560
	Financial Aid:	100% of all freshmen judged to have financial need received financial aid. Average financial aid package of all students determined to have need: $16,697
ALUMNI & DEVELOPMENT	Endowment Size:	Endowment & Related Funds, June 30, 1999: $77 Million
	% Alumni Giving:	Five-Year Average, 1994-95 through 1998-99: 41%

JUNIATA'S EDUCATIONAL HERITAGE

JUNIATA'S EDUCATIONAL HERITAGE

The College 8
- Mission Statement 8
- Brief History 8
- Commendations 9
- Academic Principles 10
- Juniata's Approach to Student Development 10
- Accreditation 10

The Campus 11
- Instructional Technology 11
- Instructional Facilities 13
- General Facilities 13
- Residence Halls 15
- Environmental Studies Field Station 15
- Baker-Henry Nature Preserve and Baker Peace Chapel 15

Juniata's Educational Heritage

Mission Statement

Juniata College is a community dedicated to providing the highest quality liberal arts education. The aim of that education is to awaken students to the empowering richness of the mind and to enable them to lead fulfilling and useful lives.

As a community, Juniata is especially concerned with the environment necessary to foster individual growth. It therefore values mutual support, the free exchange of diverse ideas, and the active pursuit of both cooperative and individual achievement. As a member of the international community, Juniata extends the student's academic experience into the world and encourages the free and open exchange of thought among peoples from distinct cultures and nations.

Individual growth first requires the development of basic intellectual skills: the ability to read with insight, to use language clearly and effectively, and to think analytically. A Juniata education helps students to understand the fundamental methods and purposes of academic inquiry and encourages them to achieve an informed appreciation of their cultural heritage. On this foundation, Juniata students are stimulated to exercise creativity and to develop those fundamental values—spiritual, moral, and aesthetic—which give meaning and structure to life.

The qualities of mind and character nurtured within the Juniata community permit our students to realize their full potential as contributors to society, informed citizens, and caring and responsible adults.

Brief History

Juniata is an independent, co-educational college of liberal arts and sciences, founded in 1876 by members of the Church of the Brethren to prepare individuals "for the useful occupations of life."

Juniata's first classes were held on April 17, 1876 in a cramped, second-story room over a local printing shop. Two women and one man were in attendance. Unlike the common model at the time, Juniata was co-educational from the beginning. In 1879, classes were moved to Founders Hall on the present Juniata campus, known as College Hill and located in the west end of Huntingdon. The town is a county seat of 10,000 and lies in the scenic Central Pennsylvania mountains, mid-way between Interstate 80 and the Pennsylvania Turnpike.

The Juniata community now has available 38 buildings on nearly 1,000 acres, including the 315-acre Baker-Henry Nature Preserve. A 665-acre Environmental Studies Field Station on nearby Raystown Lake is leased from the Army Corps of Engineers and provides one of the most distinctive opportunities in environmental science in the nation.

As of June 30, 1999, Juniata's total financial assets were $113.11 million. For the 1999-2000 fiscal year, the total operating budget of the college was $24.5 million.

Primarily residential (87% of the student body lives on campus), Juniata maintains an enrollment of approximately 1,275 students. Seventy-six percent are from Pennsylvania. Last year's student body represented 32 states and territories, and 21 foreign countries.

Commendations

Juniata holds a place of national prominence in higher education. Repeatedly recognized for academic quality, Juniata has earned noteworthy levels of achievement:

- Juniata was recognized by ABC News for the college's highly acclaimed Science-In-Motion Program;
- U.S. News & World Report ranks Juniata among the top 100 national liberal arts colleges in the nation;
- For the sixteenth year in a row, Juniata is registered in Peterson's Competitive Colleges, a guide to over 300 institutions consistently having more qualified applicants than can be accepted;
- Juniata is included in The Barron's 300: Best Buys in College Education. At these schools, students report they are getting their money's worth in terms of faculty attention, inspiring and useful programs, and personal and professional development;
- Juniata has been classified by the Carnegie Foundation for the Advancement of Teaching as one of the most highly selective colleges in the nation;
- Juniata was recently ranked 59th out of all similarly selective colleges and universities in the Yahoo! Internet Life survey of "America's Most Wired Colleges." The annual report card identifies the nation's top Internet-connected colleges and universities.
- The 1997 Nobel Prize in Physics was awarded to William D. Phillips, a 1970 graduate. Dr. Phillips still considers veteran 39-year Juniata professor Dr. Wilfred Norris one of his biggest influences in the field of physics.
- In each of the last two years, a Juniata student was named to USA Today's All-USA College Academic Teams.
- Juniata alumni are highly successful in a wide range of careers, just a few of which include: Bruce Davis '65, executive director, Academy of Motion Picture Arts & Sciences; Dr. John Kuriyan '81, the Haggerty Professor of Molecular Biophysics, The Rockefeller University; Lieut. Gen. Ronald Blanck '63, former US Army Surgeon General; Harriet Richardson Michel '65, president, National Minority Supplier Development Council; Marta Daniels '70, executive director, OPTIONS (a university outreach program on international security); Peggy Howsare Young '62, president, NOVA Research Company; Aliceann Wohlbruck '58, executive director, National Association of Development Organizations; and Robert Waggoner '73 a field judge in the National Football League.

  Of some 11,000 alumni, many have continued their education at some of the best graduate and professional schools.
- A recent national study of 518 private, non-doctoral degree-granting institutions ranked Juniata in the TOP 60 in the percentage of graduates who eventually earn doctoral degrees.
- Date provided by the National Research Council ranked Juniata in the TOP 6% of 518 colleges across the nation in the number of biology graduates who have earned their Ph.D. and the TOP 2% in the number of physical sciences graduates earning their Ph.D.

- Many Juniata students have received graduate assistantships and fellowships. Some have been awarded Root-Tilden Scholarships while others have earned National Science Foundation and Rockefeller Theological Fellowships. In 2000, 1997 and 1995 Juniata graduates won Fulbright Scholarships; Juniata students received Goldwater Scholarships in 1999, 1998, and 1997; eleven Juniata students have won scholarships from the Saint Andrews Society of Philadelphia since the inception of the award 21 years ago; in 2000 an environmental science student at Juniata was one of three students selected from Pennsylvania to receive a Morris K. Udall Foundation scholarship; and in 1999 three students were awarded prestigious study-abroad scholarships -- an Andrew Mutch Scholarship by the St. Andrew's Society, and two National Security Education Program Undergraduate Scholarships for Study Abroad.

Juniata's national reputation may be strongest in several pre-professional fields. During the last several years, the average acceptance rates have been exceptionally high.

- Nearly 94% of Juniata's applicants have been accepted to medical, dental, optometry, podiatry, and veterinary schools.
- In the past five years, over 90% of Juniata's applicants to law school have been accepted.

Placement figures, especially in the areas of education, community service, and business and industry, have also been impressive. In fact, of those students surveyed by the College's placement services, 98% were employed, attending graduate school, or pursuing other post-graduate activities as planned within six months of graduation.

Academic Principles

The success of students is directly linked to Juniata's strong, dedicated faculty who consider teaching and advising their primary responsibilities.

The College supports a flexible, "value-centered" curriculum, wherein students may design their own Programs of Emphasis, which often transcend traditional majors. Programs of Emphasis may be tailored to personal goals and needs, may lead to either a B.A. or B.S. degree, and may include courses from among 19 academic departments. Each student consults with two faculty advisers and may also seek counsel from Career Services staff and Counseling staff. Coursework takes place both on and off campus and includes such varied experiences as seminars, fieldwork, "on-the-job" internships, study abroad, independent study and research.

Juniata's Approach to Student Development

As a community that focuses on the whole person, Juniata recognizes the importance of both curricular and co-curricular aspects of student development. Juniata has bridged the traditional higher education dichotomy between academic affairs and student affairs by merging these two branches of the College, a structural move that integrates the student's college experience. Academic affairs and student services officers meet regularly to coordinate efforts to meet students' educational and social development.

Accreditation

Juniata College is accredited by the Middle States Association of Colleges and Schools and is on the approved list of the American Association of Collegiate Registrars and Admissions Officers. The College is certified by the American Chemical Society and

the Council on Social Work Education and is authorized by the Commonwealth of Pennsylvania to award teaching certificates in Early Childhood Education, Elementary Education, Special Education and 13 areas in Secondary Education. The College is a member of the National Association of Independent Colleges and Universities, the Pennsylvania Association of Colleges and Universities, the Council of Independent Colleges, and numerous other state and national professional associations.

THE CAMPUS

Few colleges have more attractive settings in which to learn than Juniata. With over 1,000 total acres available for use, the College has ample room to grow while maintaining the charm and serenity of its natural settings.

Instructional Technology

Strengthening the teaching-learning process through the effective use of modern technology is a high priority of Juniata. Recently, Juniata was ranked 59th of all similarly classified colleges and universities in the Yahoo! Internet life survey of "America's Most Wired Colleges." An ATM based network backbone provides connectivity in residence halls, classrooms, laboratories and offices. All students are automatically given accounts on the NT file and print server and the e-mail server. This account provides e-mail, Internet access and access to the Juniata on-line library catalog, CD-Rom services, and web based searches for all students and faculty. Four major public computing areas provide students access to PC-based word processing, spreadsheet, presentation, statistics and database software in addition to e-mail and Internet access. A number of classrooms are fitted with computer projection equipment. A description of individual facilities follows.

IT Program - Juniata recently received over $4 million in gifts to create an Information Technology program designed to educate tomorrow's leaders in the burgeoning field of technology.

Academic Computer Center - The center is an attractive and spacious complex housed in the hub of the Brumbaugh Science Center. In addition to the NT servers, core networking equipment, and web server, the center contains public computer laboratories with 30 windows-based PC's with networked laser printers. This area is typically a beehive of student activity.

Good Hall Computer Center - This classroom/laboratory houses 21 networked windows-based PC's, two laser printers, a mark sense reader and computer projection. The room is used extensively for instruction in business and psychology as well as for public access.

P107 and P223 Classroom Laboratories - These high tech classrooms/laboratories located in Brumbaugh Science Center. each contain computer projection capability and up to 30 Pentium windows-based PC's, and networked printers. Regularly scheduled mathematics and computer science courses meet in these rooms, which are available for public access when not used for scheduled courses.

On Demand Education Resource and Collaboration Center - This computer lab with specialized software and training software is located in the Brumbaugh Science Center and features 4 high-end Pentium computers and work space for project collaboration..

Foreign Language/Education Laboratory (FLED) - The Departments of Education and Foreign Language share a computing laboratory equipped with IMacs and an

instructor station. This facility, located in Good Hall, is used for study and evaluation of instructional software, computer-assisted foreign-language instruction, document preparation, networking, and educational computer coursework. This facility offers extended hours for maximum student use.

Graphics Processing Center - Located in Good Hall, this facility contains digital scanning technology. An ongoing use of the facility is to scan slides used for instruction in art history. The scanned images are stored on a networked file server allowing students to study the images in the computer laboratories. Students can call up the images at multiple locations on campus and enlarge selected parts of the images for more detailed study.

TeleLearning and Teleconferencing - Juniata is a member of CAPE, a consortium of 109 Pennsylvania Colleges, Universities, Medical Centers, K-12 schools and Corporations linked by the mediums of interactive compressed video and Web technologies. In 1995 the College opened an interactive "TeleLearning" classroom and studio capable of sending or receiving live or recorded broadcasts to or from any similarly equipped site in the world.

Teleconferencing and Distance Technology - Juniata is a member of CAPE, a consortium of 26 Pennsylvania Colleges and Universities to be linked by the medium of interactive compressed video-conferencing. In 1995 the College opened an interactive audio-visual classroom and studio capable of sending or receiving live or recorded broadcasts to or from other consortium member institutions.

Human Interaction Laboratory - This facility, located in Good Hall, is set up with closed circuit TV, audio and video recording equipment and with an adjacent live viewing area. The facility is used for observing and recording micro-teaching, individual and group role playing, practice interviews, business or research presentations and small group decision-making for the purposes of developing better communication skills and studying group interactions.

Computer Imaging Studio - The facility, located in Carnegie Hall, has 16 G4 Power Macintoshes with high resolution graphic displays, specialized software for producing and manipulating graphic images and a rear-projection interactive SmartBoard for instruction. A color scanner and digital camera are also available. The facility is used for visual design, including drawing, painting, graphic design, photography and animation, in art courses and other applications.

Mobile High Tech Instructor Stations - Mobile high technology instructor stations have been developed for use in several areas. The stations include computer projection from multi-media computers that can be plugged into network ports in the classrooms.

The Twenty-first Century Classroom - This advanced learning environment is located in the Brumbaugh Science Center and is home to the latest high-resolution projection television system. The system features programmable learning technology capable of integrating video, CD ROM, or computer generated material for projection onto a screen measuring 10' x 10'.

The TLT (Teaching-Learning Technology Center) - The TLT Center provides faculty members the latest hardware, software and training to maximize instructional use of information technology. Juniata faculty members recognize the importance of technology in today's society and bring that technology into the classroom through the TLT Center.

Juniata's Cyber Connection - The Cyber Connection offers a café-like environment containing multiple networked terminals, providing an inviting atmosphere for checking e-mail or surfing the net.

Instructional Facilities

Carnegie Hall (1907; renovated in 1998), once the College library, is a center for the fine arts. Its *Henry and Mabelle Shoemaker Gallery* and *Edwin and Susan (Rabinowitz) Malloy Gallery of Art*, replete with original stained glass windows and skylight, are used for exhibits, lectures, and receptions. Carnegie Hall is home to the Worth B. Stottlemyer and Guenther Spaltmann art collections. The hall also includes studios, darkroom, and the *Juniata College Museum* (in the second floor rotunda). The Art Department's Ceramics Studio is on the northern perimeter of the campus. For the musical arts, headquarters is *Swigart Hall* (1950), an attractive, white-brick building also on the northern side of the campus. Purchased for the College with a gift from W. Emmert Swigart '06, it contains faculty offices, practice rooms, teaching studios, and classrooms, one of which is home to a Yamaha Piano Laboratory.

For research of all kinds, the *Brumbaugh Science Center* (1965) is among the best equipped in the nation for a liberal arts school. Instrumentation includes an atomic force microscope, an electron microscope, a gas chromatograph-mass spectrometer, two nuclear magnetic resonance spectrophotometers, and an x-ray defractometer. Three separate wings house five departments (chemistry, biology, mathematics and computer science, physics, and geology) and the College Academic Computer Center. The circular hub includes Alumni Hall, a 400-seat auditorium, and two smaller lecture halls.

Plans are underway for the construction of the *William J. von Liebig Center for Science*, a $20 million state of the art facility for biology and chemistry, to be completed for the fall of 2002.

In addition, the 665-acre Environmental Studies Field Station on nearby Raystown Lake is leased from the Army Corps of Engineers and provides one of the most distinctive opportunities in environmental studies in the nation.

The center for the social sciences, *Good Hall* (1967) contains more than 30 classrooms, two computer facilities, the business department's case study room, and three instructional laboratories: psychology, modern languages, and human interaction. A second facility, the *Early Childhood Education Center*, is located in *Maude-Lesher Hall*.

The humanities are currently headquartered in the *Charles A. Dana Humanities Cluster*. The cluster includes *Carnegie Hall*, the *I. Harvey Brumbaugh House*, the *James Quinter House*, and the *Humanities Center* (1979). The Humanities Cluster buildings house faculty offices, seminar rooms, and small classrooms, while the surrounding lawn and campus areas accommodate outdoor classes and art displays.

General Facilities

Founders Hall is the oldest building on campus. Constructed in 1879 (and renovated in 1979) on land donated by local citizens, it still houses most administrative offices, including the President's Office, Provost's Office, Student Services, the Registrar, Academic Support Services, and College Advancement Offices.

The Enrollment Office is headquartered in the *William E. Swigart, Jr. Center* on 18th Street between Good Hall and the Brumbaugh Science Center. It should be the first stop on any campus visit. The College Public Relations Office, and the Alumni Relations Office are located in the *Harold B. Brumbaugh Alumni House* on Mifflin Street behind Good Hall. Financial Affairs (accounting, business, administrative information services, and the print shop) is housed in *Oneida Hall*, which lies between Founders Hall and South Hall.

The Oller Center for Peace and International Programs (1999) houses the offices of International Programs and Peace and Conflict Studies. The International Programs Office (IPO) coordinates Juniata's internationalization efforts. The office staff support the College's international student population, maintain an active study abroad program, assist faculty in curricular and programmatic planning, and enhance the international environment of the College.

The Ellis College Center (1969) is noted for its imposing entrance columns, and honors Juniata's sixth and seventh presidents, Charles C. and Calvert N. Ellis. A focal point of student life, Ellis houses the Career Services Office, Counseling Center, Information Desk, Teaching-Learning Technology Center, Director of Housing and Conferences, Assistant Dean of Students for Programming and Orientation, bookstore, post office, broadcasting center for WKVR radio, and offices for Student Government, Juniata Activities Board (JAB), *The Juniatian*, Laughing Bush, and other student organizations. In addition, the dining hall (the 680-seat Baker Refectory), Muddy Run Café, a ballroom, student lounge areas, and conference rooms are here.

Juniata's *L.A. Beeghly Library* (1963) provides the College community with a Web-based online public access catalog and library system, many periodical databases and other research databases, a collection to support undergraduate research, and a staff ready to assist patrons by answering questions, providing services, and teaching. The Library's online system is accessible throughout the campus and beyond, making it a true library without walls. The Library contains some 208,000 bound volumes, microforms, government documents, audio-visual resource materials, access to over 3,000 periodicals, and several prominent rare book and document collections. There is study space for 400 patrons, including several study rooms, and network ports. Almost all books and periodicals, except some rare editions in the W. Emmert Swigart Treasure Room, are accessible on an "open-stack" basis. The Library also houses the writing center and a curriculum library.

For cultural events, *Oller Hall* and the *Rosenberger Auditorium* (1940) seats 900 and is used by most visiting speakers and performers, as well as for student and faculty productions. The auditorium's acoustics are rated highly and the showpiece is a 2000-pipe Moller organ. The large proscenium stage is equipped with modern lighting and sound equipment.

With the completion of the *Kennedy Sports+Recreation Center* (1983), Juniata students were provided with the most modern of recreational facilities. A hub for out-of-classroom activity, the Kennedy Center contains two gymnasiums; a six-lane, 25-meter swimming pool; and the *F. Samuel Brumbaugh and Martha A. Brumbaugh Strength and Fitness Center* (1998); a wrestling room; racquetball/handball courts; sauna facilities; and three expanded locker rooms. Dedicated to those from the College who served in World War I and II, the *Memorial Gym* (1951) serves as the center for varsity sports activity with a seating capacity of 1,200 for basketball and volleyball.

Outdoor facilities include the *Raffensperger Tennis Courts*, several intramural and practice fields, *Langdon Field* (baseball and field hockey), *Knox Stadium* (football), the *Jefford F. Oller Track* and the new soccer and field hockey fields.

Other College buildings, although not located on campus, include the *Patrick Lodge* and the President's House.

Residence Halls

With Juniata's residence halls and apartment facilities, the College can accommodate more than 1,100 students. Most residence halls have been completely renovated to include computer and cable hookups in each room as well as digital phones with individual voice-mail capabilities. Residence halls also have recreation rooms, study rooms, lounges, and laundry facilities. Among the residence halls is *The Cloister* (1928; renovated in 1994) located at the center of campus. An outstanding example of Pennsylvania German architecture, it vividly recalls the heritage of the College. At the other end of the architectural spectrum are the *East Houses* (1970; renovated in 1999), a complex of four modern sections providing apartment-style living.

Tussey-Terrace (1966; renovated in 1997), *Sunderland Hall* (1955; renovated in 1992), and *Sherwood Hall* (1961; renovated in 1992) form part of the northern boundary of the campus. *Maude-Lesher Hall* (1957) is just across the street from the College Center, while *South Hall* (1962; renovated in 1995) overlooks College Field. College off-campus residences within convenient walking distance include the *Mission House* at 18th and Washington Streets, *"Pink Palace"* on Moore Street, and *Hess Apartments* on 14th and Washington Streets

Environmental Studies Field Station

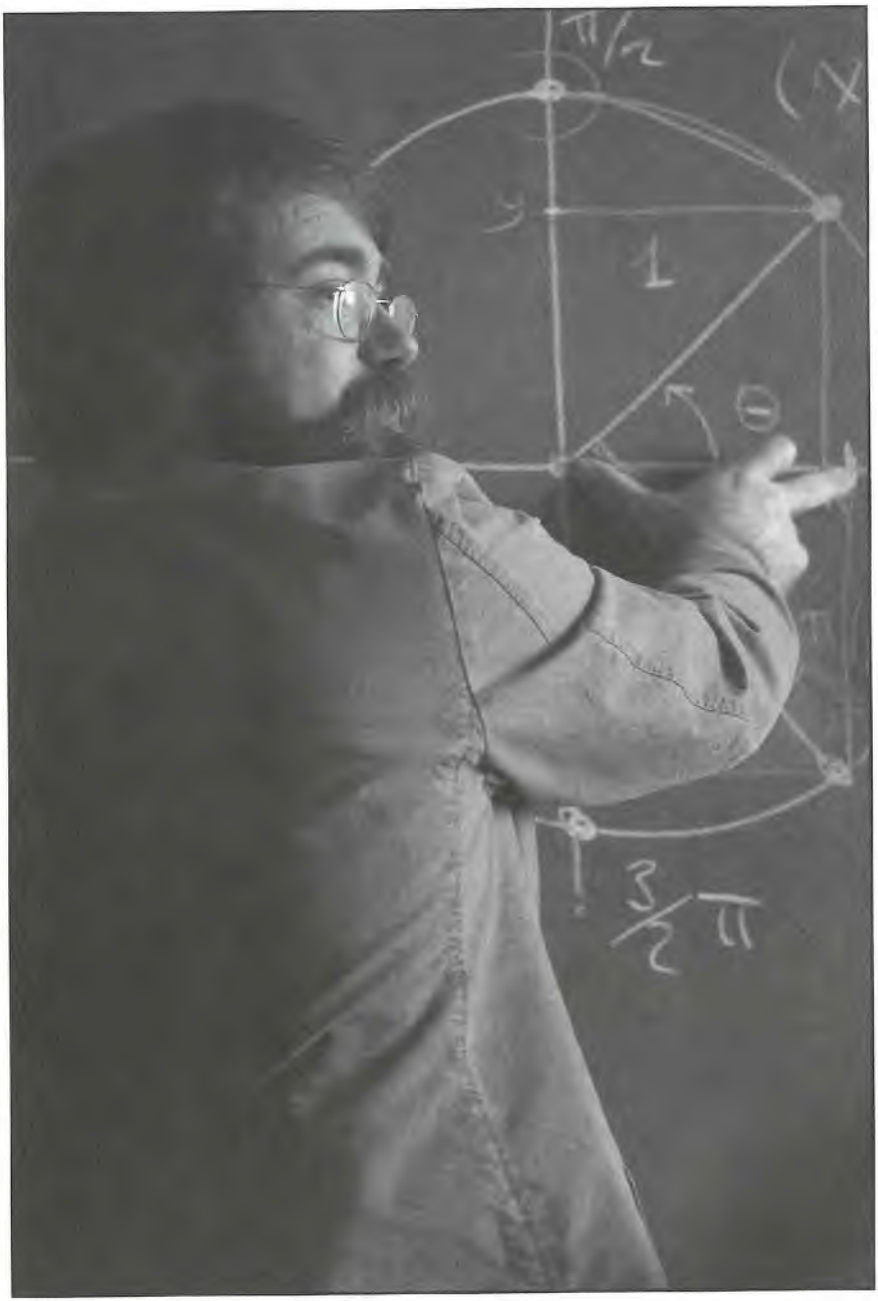
In addition to the main campus and other buildings, Juniata has access to two parcels of land totaling over 980 acres. The biggest parcel, *The Raystown Environmental Studies Field Station*, is leased from the Army Corps of Engineers. The Field Station, encompassing a complete watershed, consists of 365 acres for exclusive College use and a 300-acre buffer area. It is centrally located on Raystown Lake, the largest lake wholly in Pennsylvania (8,300 acres, 110 miles of shoreline), near the village of Marklesburg, 15 miles south of campus.

A completely remodeled 19th Century farmhouse serves as Field Station headquarters and provides overnight quarters for students and visiting researchers, and also houses the Frank A. Pierce Laboratories. In addition, a permanent dock has been constructed in the station's natural harbor. The station has a fleet of five boats, including a houseboat and floating chemistry lab.

Baker-Henry Nature Preserve and Elizabeth Evans Baker Peace Chapel

In addition to the main campus and other buildings, Juniata owns the 315-acre *Baker-Henry Nature Preserve* on which is located the *Elizabeth Evans Baker Peace Chapel.* Architect Maya Lin, who also designed the Vietnam Veterans' Memorial in Washington, DC, and the Civil Rights Memorial in Birmingham, Alabama, designed the Baker Peace Chapel. The Chapel is a place for both private meditation and public celebration. A grassy path ties two hilltops together: on one, a single, polished granite circle set in a bed of moss; on the other, a forty-foot circle of rough cut English granite.

ACADEMIC PROGRAMS



ACADEMIC PROGRAMS

The Curriculum 18
Core Requirements 18
Liberal Arts: Distribution 18
Cultural Analysis Component 19
Communications Component 19
Quantitative Component 20
Program of Emphasis (POE) 20
Designated POEs 21
Individual POEs 22
Pre-Professional Programs 22
Health Professions 22
Pre-Law 23
Social Work 23
Teaching 24
Cooperative Programs 24
Dentistry: 3+4 Program 25
Optometry: 3+4 Program 26
Podiatry: 3+4 Programs 26
Engineering: 3+2 Programs 26
Law 3+3 Program 27
Marine Semester 27
International Programs 27
Study Abroad 28
Juniata College Exchange Programs 29
Brethren Colleges Abroad 29
Junior Year Abroad at the University of Leeds 30
Summer in France 30
Summer in Mexico 30
Summer in Germany 30
Other International Study 30
International Studies Certificate 31
Intensive English Program 31
Internships 32
Internships for Credit 32
Philadelphia Urban Semester 33
Washington Center 34
Washington Semester 34

The Curriculum

Educated persons must be prepared for lifelong learning, for continually dealing with changing perceptions and new bodies of knowledge. Beyond facts which become outdated, they must learn to ask intelligent questions, to make informed decisions, and to think confidently for themselves.

Educated persons should be capable of regulating their own lives, not only with regard to decisions made in vocational contexts, but within the larger contexts of their lives as citizens and social beings. An institution in the liberal arts tradition must take as its goal not only provision of the best possible career training, but also provision of the skills and knowledge graduates need to make contributions to the total community. At Juniata, we believe the procedures of acquiring an education are an important part of the educational process. Therefore, certain educational decisions are made by each student using the information provided by faculty advisers and the intellectual skills developed during the first few semesters at the College.

Educated persons should be able to think independently about intellectual and moral issues. Juniata's program is designed, therefore, to promote and develop the habits of mind and communications skills needed to make and implement decisions. Students wrestle with profound issues of human values, not only as dealt with in the past, but as they affect current thinking in a student's chosen field.

Core Requirements

Students tailor much of their academic programs to their own goals and needs, but there are minimum curricular requirements for receiving a degree from Juniata. Special adjustments in these requirements will be administered by the Registrar according to policies developed by the Curriculum Committee. Questions will be answered by the Registrar or faculty advisers. Also, all courses available for college credit require Curriculum Committee approval.

Students are responsible for ensuring that all graduation requirements are completed. The student must satisfactorily complete or maintain a **MINIMUM** of the following:

I. **Liberal Arts: Distribution**

The intent of the distribution requirement is to assist students in broadening their education. This breadth helps students to develop and retain the intellectual flexibility necessary to cope with their rapidly changing environment.

Students must complete at least six credit hours of coursework in each of the following five areas. In three of these five areas, at least one course must have a prerequisite or be at the 300-level.

Fine Arts (F): The Fine Arts requirement enlarges the domain of students' sensibilities and extends the range of their expressive abilities by providing a minimal acquaintance with the fundamental forms of aesthetic experience. Courses either involve students in the practice of certain artistic skills or in the study of the history of their development and practice, or both. Offerings include courses in Art, Music, Theatre, and Creative Writing.

International Studies (I): Because we live in a steadily shrinking world, almost every issue of significance quickly becomes a global issue. Introducing an awareness of foreign values and points of view into the intellectual habit of our students is especially important. Liberal arts learning at its best should equip our students

to deal responsibly with the larger world they inhabit. A course may receive an "I" designation if it meets one of the following criteria: 1. The primary aim of the course is to introduce students to the history, culture, or civic life of one or more culture(s)/ country(ies) other than the United States, or to compare the history, culture, or civic life of the United States and one or more other culture(s)/country(ies); 2. The course requires students to think and express themselves in a language other than English; 3. The course examines the social or cultural world of humans at a systemic level, i.e. it examines the international economic system, international politics, international law, etc. "I" courses include anthropology, foreign languages, geography, non-U.S. history, non-U.S. political science, non-U.S. art history, and non-Western literature and religion.

Social Science (S): No education in modern times would be adequate without some understanding of how human behavior is determined, both individually and corporately. Leadership requires knowledge of both the insights and limitations of scientific study of the forces and factors which structure human life. Social Science courses include anthropology, business, economics, education, peace and conflict studies, political science, psychology, and sociology.

Humanities (H): Students need to have some sense of their 'cultural identity,' that is, what are the forms of thought, literature, and history which have given shape and meaning to western life. An indispensable aspect of this study is acquiring the habits of mind (skepticism, imagination, judgement) necessary to reinterpret the values of this heritage in the face of the complexity and ambiguity inherent in every human situation. Humanities courses include offerings in communications, foreign languages, history, literature, philosophy, and religion.

Natural Sciences (N): Nothing is more central to intellectual advance than the study of nature and the acquisition of those analytical attitudes of mind necessary for systematic inquiry about the universe in which we live. To learn the role of accident and revision in the process of discovery is as important as learning the methods and discipline for the scientific pursuit of truth. Science courses that fulfill this requirement include astronomy, biology, chemistry, geology, physics, mathematics, and computer science.

II. Cultural Analysis Component

Each student takes two courses designed to develop the necessary skills to identify, understand and analyze culture. The first Cultural Analysis (CA) course, chosen from a selection of approved courses, prepares students with the skills to think critically about culture from a variety of theoretical and comparative perspectives. Students are introduced to a variety of texts and media selected to stimulate discussion of the nature of modernity and how the interactions between proponents and opponents of the modern have shaped the world in which we live. Course materials reflect some of the principal ideas and assumptions behind the institutions and beliefs that inform perceptions, definitions and critiques of the modern world. For CA II, students also have a choice from among a list of courses designed to enhance their skills in identification, understanding, and analysis of culture.

III. Communications Component

A) The College Writing Seminar, an interdisciplinary course in the freshmen year, introduces students to the diverse modes of thought and communication that characterize the college experience, and will help them think and express them-

selves more effectively in and out of the classroom. The course focuses primarily on reading and writing skills, and integrates instruction of computer and library research skills and attention to study skills, career planning, and other issues relevant to first-year college students. The integrative approach is based on the belief that curricular and co-curricular activities are inseparable, and that life skills cannot and should not be compartmentalized.

B) In addition to the College Writing Seminar, students will take at least four "C" courses (minimum 12 credits), two of which must be writing-based and two of which may be speech-based. Two courses must be in the P.O.E. and at least one of those courses must be at the 300-level or above.

A writing-based (CW) course requires at least 25% of the grade be determined by one or more writing assignments that receive structured feedback on the writing by the instructor. This structured feedback appears on: 1) one or more writing assignments that require multiple submissions to be reviewed and commented upon by the instructor; and/or 2) multiple writing assignments where earlier graded, commented upon assignments are returned to students before later assignments are due. Either option pertains to individually written or collaboratively written assignments. A speech-based (CS) course requires at least 25% of the grade be determined by active student participation in two or more oral individual or group presentations, and it fulfills two requirements: (1) The course aims to develop rhetorical skills (speech design and delivery, listening, negotiation, leadership, persuasion, collaboration, or decision making) necessary for effective and creative speech in individual, group or public presentation. (2) The course offers students at least two opportunities to demonstrate these skills. Evaluation of the first opportunity guides improvement of the second.

IV. **Quantitative Component**

Students must demonstrate (1) basic competency in statistics, and (2) an understanding of basic mathematical skills. To satisfy the requirement students have three options: (1) completion of a "Q" course, which deals explicitly with both statistical and mathematical skills or (2) completion of a statistical (QS) and a mathematical (QM) course or (3) pass proficiency exams in math and statistics.

V. **Program of Emphasis (POE)**

More than 50 percent of Juniata graduates elect to develop an individualized POE. Students are encouraged to select the POE format that best serves their needs.

The Program of Emphasis (POE) is Juniata's unique approach to focused education in an academic area of a student's choosing. Somewhat similar to a traditional "major," the POE consists of up to half of the total degree and is an opportunity for students to explore in depth a particular discipline or to craft an interdisciplinary plan to study an area. With advisers' help, students draft a POE goal statement, identify classes, and develop rationale for their program. Students may choose an already developed "Designated POE" or construct their own "Individualized POE" with the help of their two advisers and the approval of the appropriate faculty committee.

Students must design and complete a Program of Emphasis (POE) consisting of 45-60 credit hours with a minimum of 18 credit hours at the 300- or 400-level. Interdisciplinary POEs may have a maximum of 90 credit hours.

VI. **Students must complete at least 120 credits with a minimum cumulative grade point average of 2.00 to graduate.**

Following is a list of the approved designated POEs coordinated through the departments indicated.

Department	*POE Title*
ART	Art History
	Museum Studies/Art History Focus
	Studio Fine Arts
BIOLOGY	Biology
	Biology-Secondary Education
BUSINESS	Accounting
	Economics
	Management
CHEMISTRY	Chemistry
	Chemistry/Education
	Biochemistry
EDUCATION	Early Childhood Education
	Elementary Education
	Secondary Education
	Biology
	Chemistry
	Communication
	Earth and Space Sciences
	English
	Foreign Languages (French, German, Spanish)
	General Science
	Math
	Physics
	Social Studies
	Unified Early Childhood Special Education
	Unified Elementary Special Education
ENGLISH, COMMUNICATION, THEATRE ARTS	Communication
	Communication-Secondary Education
	English
	English-Secondary Education
	Medical Communication
ENVIRONMENTAL SCIENCE AND STUDIES	Environmental Science and Studies
FOREIGN LANGUAGES	French
	Foreign Language-Secondary Education (French, German, Spanish)
	German
	International Studies
	Russian
	Spanish/Hispanic Cultures
GEOLOGY	Earth and Space Science-Secondary Education
	Geology
	Natural History
HISTORY	History
	Social Studies-Secondary Education
INFORMATION TECHNOLOGY	Information Technology
MATH AND COMPUTER SCIENCE	Computer Science
	Mathematics-Secondary Education
PEACE AND CONFLICT STUDIES	Peace and Conflict Studies
PHILOSOPHY	Secondary Emphasis Only
PHYSICS	Engineering Physics
	Physics-Secondary Education
	Pre-Engineering
POLITICS	Political Science
PSYCHOLOGY	Psychology
RELIGION	Secondary Emphasis Only
SOCIOLOGY	Anthropology
	Criminal Justice
	Social Work
	Sociology

Following is a list of some recent student initiated individual POEs.

Computer Science/Graphic Design
Chemistry/Studio Art
Writing and the Environment
Communication and the Cultural Arts
Pre-Genetic Counseling
Biology and Social Issues
Psychology and Fine Arts
Pre-Medicine/Philosophy
Accounting/Environmental Studies
Art and Cultural History
Computerized Polity
Political History
Ecology/International Studies
Social Work & Business Management
Management and Computer Science
Mathematics/Communication

PRE-PROFESSIONAL PROGRAMS

Juniata offers a number of programs that provide preparation which enables students to enter the specialized fields of health, law, social work, and education. Interested students should contact one of the advisers listed.

Health Professions

Advisers: Professors Kirchhof-Glazier, Goldstein, Keeney, Borgardt, Lewis, Ochiai, Radis, Russey, Siems, and Stroman

In the area of health professions, Juniata has an impressive array of programs with 15 different affiliated institutions. Our well-rounded and rigorous curriculum gives our students exceptionally good preparation that is recognized and valued by the professional schools. Students work closely with an adviser from the Health Professions Committee to choose an area and a program that best suits their needs and to ensure they obtain the specific requirements for admission to professional school.

We offer programs in the fields of Biotechnology, Cardiovascular Technology, Cytogenetics, Cytotechnology, Chiropractic Medicine, Dentistry, Diagnostic Imaging, Health Communication, Genetic Counseling, Health Admisistration, Medical Technology, Medicine, Nursing, Occupational Therapy, Optometry, Pharmacy, Physical Therapy, Physician Assistant, Podiatric Medicine, Public Health and Veterinary Medicine. Students interested in a career in the health professions must meet the specific requirements for admission to a professional school. Since these vary from school to school, the students consult with a member of the Health Professions Committee as they prepare their sciences so that students not only have an excellent chance of acceptance into professional schools, but also receive a breadth of knowledge that provides a firm career foundation in a health-related area.

Affiliations with Tulane University School of Medicine, Lake Erie College of Osteopathic Medicine, New York Chiropractic College, the Johns Hopkins University School of Nursing, the Temple University School of Podiatric Medicine, the Ohio College of Podiatric Medicine, Temple University School of Dentistry, the Pennsylvania

College of Optometry, The Frances Payne Bolton School of Nursing at Case Western Reserve University, Thomas Jefferson University College of Health Professions, MCP/Hahnemann, Widener University, Abington Memorial Hospital, Altoona Hospital, and Lancaster Institute for Health Education offer joint programs with Juniata that lead to bachelor's, master's, or doctoral degrees. For all the affiliated schools (with the exception of the PACE program at Thomas Jefferson University) students may apply for the program of their choice after four years of study at Juniata. In addition, students who attend Juniata for three or four years and complete all graduation requirements receive a bachelor's degree from Juniata in addition to the degree awarded by the affiliated institution. (See Cooperative Programs)

Students are encouraged to gain in-depth exposure to the health sciences through internships, independent study projects, student-in-residence programs, participation in the Primary Care Pre-Admissions Program offered by the Pennsylvania State University College of Medicine at Hershey, and various research opportunities, including an annual summer position in the lab of Juniata alumnus, Dr. Greg Stahl '84, at Harvard Medical School.

Pre-Law

Advisers: Professors Barlow, Fisher, Goldstein, Hsiung, and Weaver

The pre-legal student should seek a broad undergraduate experience in the liberal arts. Students interested in law should have a thorough command of English, an extensive background in research methods, considerable training in the use of source materials, and a critical understanding of the human institutions and values with which the law deals. Juniata also offers courses in conflict resolution, a growing field in the legal profession. Although students may develop any Program of Emphasis which suits their particular talents and interests, the experience of others indicates that English, history, politics, American studies, and economics are the most common programs of students entering law schools.

Social Work

Advisers: Professors Radis and Reilly

The Dorothy Baker Johnson and Raymond R. Day Social Work Program, accredited by the Council on Social Work Education since 1982, is designed primarily to prepare students for beginning professional practice in the field following successful completion of the undergraduate requirements. An important secondary objective of the program is preparation for graduate education in social work and related areas of study.

Students who seek professional competence in assisting individuals, families, groups, and communities in solving human problems develop Programs of Emphasis which reflect an interdisciplinary approach to undergraduate study. A foundation of courses from the natural and social sciences is combined with specific courses in social work practice and social welfare policy. Such a program also allows the student to focus on a particular area of inquiry (e.g., health care, criminal justice, families and children, developmental disabilities, etc.) that may complement the social work interest.

Of great importance to the social work student is Juniata's Social Work Professional Semester. In cooperation with social service agencies representing many areas of social work (e.g., medical, criminal justice, drug and alcohol, developmental disabilities, aging, family and children, etc.), the internship is organized to provide senior students with an educational opportunity to integrate and apply the skills, knowledge, and values mastered in the classroom with the daily tasks of the social worker in the field.

Teaching

Advisers: Professors Glosenger, Byron, Pauline, Richardson, and DeHaas; Director of Clinical Experiences Paula Beckenbaugh

Juniata has been preparing teachers since 1876. Juniata encourages students to obtain classroom experience as early as their Freshmen year. Students today can prepare for teaching in public or private schools at several levels: early childhood, elementary, elementary/early childhood, unified elementary/special education, unified early childhood/special education, middle school or junior-senior high school. The latter certification programs include biology, chemistry, communication, mathematics, general science, earth and space science, physics, English, foreign languages (Spanish, French, German), and social studies with a concentration in history, political science, or international studies. Students interested in secondary education develop POE's in their content areas and take a common core of education courses.

Using a combination of electives and their Programs of Emphasis, students may design courses of study that meet state standards for teacher certification in Pennsylvania. Such programs include a combination of academic work in the student's interest area and professional studies, including considerable field work culminating in a professional semester of student teaching. Students may elect special opportunities for professional preparation which include, in addition to classroom instruction, work in outdoor education, practical work in local schools and day care centers, observations, field trips, extended experience in the on-campus Early Childhood Education Center, study abroad, and urban semester experience.

Students who pursue teacher certification must obtain, pay for, and pass periodic criminal clearance checks and medical checks that are required by the public schools to gain admission to practical placements. Candidates must also meet all GPA and conduct requirements that are specified in the Education Department Student Handbook. Students who meet all certification requirements and complete the professional semester satisfactorily will be recommended by the College for Pennsylvania certification. Through reciprocal agreements at the state level, graduates can also qualify for certification in many other states. Other opportunities include employment in federally funded programs, private schools, and pre-school programs, and careers in many non-teaching areas that value the human interaction skills of education majors.

In addition, the Education Department offers studies in human development which, when combined with work in psychology and sociology, can prepare students for graduate study in related fields, for child life programs, and for employment with social agencies.

Please note: Students are responsible for their own transportation to practical placements in the area schools.

COOPERATIVE PROGRAMS

The following cooperative programs are designed to complement a Juniata education and enhance a student's educational opportunities. Any program in which a student attends Juniata for 3 or 4 years results in a bachelor's degree from Juniata and a degree from the affiliated institution. Some programs may carry financial aid limits and restrictions.

Biotechnology: 2+2, 3+1, 3+2, or 4+1 Programs

Advisers: Professor Kirchhof-Glazier

Juniata has several bachelor's programs options in biotechnology with Thomas Jefferson University College of Health Professions. A degree in biotechnology offers opportunities for immediate employment or application to graduate school.

Chiropractic Medicine: 3+3 Program

Advisers: Professors Kirchhof-Glazier and Stroman

Juniata has an agreement with New York Chiropractic College that leads to a B.S./D.C. degree.

Cytogenetics/Cytotechnology: 2+2, 3+1, 3+2, or 4+1 Programs

Advisers: Professor Kirchhof-Glazier

An affiliation with Thomas Jefferson University College of Health Professions provides different options to obtain a bachelor's degree in these areas.

Dentistry: 3+4 Program

Advisers: Professors Kirchhof-Glazier and Borgardt

Juniata has an affiliation with Temple University School of Dentistry that leads to a B.S/D.M.D. degree with an accelerated option.

Diagnostic Imaging/Cardiovascular Technology: 2+2 or 3+2 Programs

Advisers: Professors Kirchhof-Glazier and Borgardt

An affiliation with Thomas Jefferson University College of Health Professions provides different options to obtain a bachelor's degree in this area, which includes training in both ultrasound and radiography or in cardiovascular technology. Students who choose cardiovascular technology have the option of an invasive or non-invasive focus. The cardiovascular technology track is the only comprehensive program of its kind at the bachelor's level in the nation.

Medical Technology: 2+2, 3+1, 3+2, or 4+1 Programs

Advisers: Professors Kirchhof-Glazier and Borgardt

The 3+1 options are offered through affiliations Juniata has with Abington Memorial Hospital, Altoona Hospital, and Lancaster General Hospital. In addition, Thomas Jefferson University College of Health Professions offers 2+2, 3+1, 3+2, and 4+1 programs leading to the bachelor's degree in this field.

Medicine: 3+4 Program

Advisers: Professor Kirchhof-Glazier

Juniata has formal affiliations with Tulane University School of Medicine and Lake Erie College of Osteopathic Medicine that provide for an accelerated option leading to the B.S./M.D. or B.S./D.O. degree, respectively. In addition, students have the option at Tulane to earn additional degrees in public health and tropical medicine.

Nursing: 2+2, 3+2, 3+4, 4+1, and 4+___ Programs

Advisers: Professors Kirchhof-Glazier and Goldstein

There are opportunities for a wide variety of programs leading to many options within the nursing field from a B.S.N. to master's and doctoral trained nurse practitioners. There are 2+2 and 3+2 bachelor's and an accelerated 4+___ (professional years vary with specialty) B.S.N./M.S.N. option with Thomas Jefferson University College of Health Professions; 2+2, 3+2, and 4+1 B.S. programs and an accelerated 3+___ and 4+___ B.S./M.S.N. program with Johns Hopkins University School of Nursing, and a 3+4 B.S./M.S.N./N.D. (Doctor of Nursing) program with the Frances Payne Bolton School of Nursing at Case Western Reserve University.

Occupational Therapy: 2+2, 3+2, and 4+2 Programs

Advisers: Professors Kirchhof-Glazier, and Stroman

Juniata has 2+2 and 3+2 B.S. programs and a 4+2 Entry Level Master's program in occupational therapy with Thomas Jefferson University College of Health Professions.

Optometry: 3+4 Program

Advisers: Professors Kirchhof-Glazier and Siems

Juniata has a 3+4 accelerated affiliation with the Pennsylvania College of Optometry that leads to the B.S./O.D. degree.

Physical Therapy: 3+3 and 4+2 Programs

Advisers: Professors Kirchhof-Glazier, Radis, and Stroman

Juniata has 3+3 Entry Level Master's Programs with Thomas Jefferson University College of Health Professions and Widener University, as well as a 4+2 Early Acceptance Master's Program with MCP/Hahnemann University.

In all these programs students also earn the B.S. from Juniata.

Podiatric Medicine: 3+4 Programs

Advisers: Professors Kirchhof-Glazier and Siems

Accelerated B.S./D.P.M. degrees can be earned through affiliations with the Temple University School of Podiatric Medicine and the Ohio College of Podiatric Medicine.

Engineering: 3+2 Programs

Adviser: Professor White

Juniata participates with The Pennsylvania State University, Washington University, St. Louis, Columbia University, and Clarkson University in cooperative programs for training in engineering. The purpose of such arrangements is to produce engineers who are educated in the fullest sense, as well as competent specialists in a particular field.

The student takes three years of undergraduate work at Juniata. Upon recommendations of the adviser and fulfillment of the transfer requirements, including the required GPA, he or she then transfers to the engineering institution for two additional years of engineering study. Upon successful completion of the five years, the student receives two degrees; a bachelor's of science degree from Juniata and an engineering degree from Columbia, Penn State, Clarkson, or Washington.

Law: 3+3 Program

Advisers: Professors Weaver, Barlow, Goldstein, and Hsiung

A special agreement with Duquesne University permits outstanding students (3.36 GPA and a score of 157 or better on the LSAT) to apply to the 3+3 program at Duquesne, enabling a student to complete studies for the law degree in six rather than seven years.

Marine Semester

Adviser: Professor Demarest

Juniata has a semester-long cooperative program with the Duke University Marine Laboratory and the Bodega Marine Laboratory of the University of California at Davis during which students enroll for 15-17 hours of credit in marine biology and oceanography. The participating student also has research options. Following a strongly competitive application process, this important opportunity will be available to a highly motivated student interested in a career in marine or aquatic sciences. Students apply in their sophomore or junior year through Professor Jeffery Demarest, professor of biology. The appointments are made following the recommendation of the provost.

INTERNATIONAL PROGRAMS

Juniata College, through its heritage, has always been conscious of its responsibility to educate people who will be capable of contributing to a peaceful global society. With a commitment to expanding international programs, Juniata looks to the 21st century with the goals of extending each student's academic experience into the wider world, supporting the free exchange of thought among peoples from distinct cultures and languages, and encouraging interaction with peoples in their language.

Study abroad began at Juniata in 1962. The College now participates in 23 study abroad programs, offers an Intensive English program for international students, hosts exchange students from twelve partner institutions, and has degree-seeking international students from 23 countries around the world. (Entrance requirements for international students may be found in the Admission section of this catalog.)

The presence of international students on campus is further enhanced by the faculty exchange program which allows faculty from our international partner institutions to give lectures in classes, participate in joint research projects, make public talks, and participate in informal interaction with students.

The International Club is an organization open to all Juniata students, not just international students, and provides a forum for exchanging ideas, for making friends, and for participating in activities from sponsoring dances to whitewater rafting in the spring. Students and faculty also host language tables in the College dining hall.

Another student-oriented organization is the Iota Chapter of Sigma Iota Rho, a national honor society "to promote and reward scholarship and service among students and practitioners of international studies and global relations, and to foster integrity and creative performance in the conduct of global affairs." Juniata established one of the initial charter chapters in the U.S. and, each spring, students whose course of study concentrates upon International Studies (including political science, history, economics, and the ability to use a foreign language) are selected for membership based on academic achievement.

The various programs of emphasis with strong international components may be

found throughout this catalog, especially under "Foreign Languages," "History," "Politics," and "Economics and Business Administration." In addition, an International Studies Certificate is available to students in any discipline; details on the Certificate follow.

An active International Education Committee composed of faculty, administrators and students helps to coordinate international activities at Juniata and to provide direction for future growth.

The International Programs Office maintains membership in several national and international organizations: NAFSA, Association of International Educators, TESOL (Teachers of English to Speakers of Other Languages), IIE (Institute for International Education), The American Forum for Global Education, Association of International Education Administrators, and PaCIE (the Pennsylvania Council for International Education).

For further information on international programs, please contact the International Programs Office, Juniata College, Huntingdon, PA 16652; tel: 814-641-3180; fax: 814-641-3185.

Study Abroad

Juniata supports a variety of programs overseas, including full academic year, one semester, and short-term summer programs. While year-long language immersion programs in which a student continues to study in the Program of Emphasis are the optimal, any experience abroad can be a time of personal and academic growth.

Participation in most Juniata-sponsored study abroad programs costs the same as tuition, room and board at Juniata. Students are, however, responsible for the cost of travel to and from the study abroad site. Study abroad programs have enrollment limits and students must meet prescribed program requirements to be eligible. Scholarships and other financial aid usually apply except for tuition exchange and the Program for Area Residents.

Juniata College is fortunate to have alumni support for study abroad in the form of scholarships. The Nyce Scholarship for study in Latin America and the William P. and Frances Clemens Nyce Endowment for Faculty Development promote interest in and knowledge of our neighbors to the south. The Rinehart-Darkatsh Scholarship for International Study in Education helps an education student to learn educational principles and methods in another country. The Max Bliss and Angus Karns Scholarship for Study Abroad supplements existing scholarship support for students who study for one academic year in France, Germany, Russia, or Spain in a non-English program.

Study Abroad Locations

China	Dalian Institute of Foreign Languages (BCA)
Ecuador	Universidad San Francisco de Quito (BCA)
	Environmental Field Station in
	Tiputini Amazon Rainforest (JCE)
France	Federation Universitaire & Polytechnique de Lille, Lille (JCE)
	Université de Nancy, Nancy (BCA)
	Université de Strasbourg, Strasbourg (BCA)
	Clarife Summer in Lille (SUM)
Germany	Fachhochschule Muenster, Muenster (JCE)
	Philipps Universität Marburg (JCE, SUM)

Greece	University of LaVerne, Athens (BCA)
India	The Cochin University of Science and Technology
Japan	Hokusei Gakuen University, Sapporo (BCA)
	Kansai Gaidai University, Osaka (JCE)
Mexico	Universidad de las Américas, Puebla (JCE)
	Instituto de Estudios Avanzados de Oriente, Orizaba (SUM)
Russia	Volgograd State Pedagogical University (JCE)
Spain	Universidad de Barcelona, Barcelona (BCA)
United Kingdom	Cheltenham & Gloucester College of Higher Education, Cheltenham (BCA)
	University College of Ripon & York, St. John (JCE)
	University of Lincolnshire and Humberside (JCE)
	University of Leeds (JYAL)

Juniata College Exchange Programs (JCE)

Adviser: Ms. Wallace

Since 1976, Juniata has had formal student exchange agreements and, currently, agreements exist with eight international universities: the Universität Marburg (Germany), the Fachhochschule Muenster (Germany), the Federation Universitaire & Polytechnique de Lille (France), University of Humberside and Lincolnshire (Hull, England), the University College of Ripon & York (St. John, England), the Universidad de las Americas (Puebla, Mexico),Volgograd State Pedagogical University (Volgograd, Russia), and Kansai Gaidai University (Osaka, Japan). Students are accepted into the program of the host institution on a full-time basis and are treated as regular members of the student body, attending classes, writing papers, taking exams, etc., side-by-side with their counterparts in the host institution. Classes are conducted in the language of the host country and supervision is provided by the host institution. Students with Programs of Emphasis from all academic departments are eligible. Those participating most heavily include Biology, Chemistry, Geology, Sociology and Social Work, Economics/Business Administration, Education, Foreign Languages, Political Science, and Peace and Conflict Studies.

Brethren Colleges Abroad (BCA)

Adviser: Ms. Wallace

With five other colleges associated with the Church of the Brethren, Juniata cooperates in a junior-year program of study known as Brethren Colleges Abroad. Both semester and year programs are offered at the Universidad San Francisco de Quito (Quito, Ecuador); the Dalian Institute of Foreign Languages (China); the Cheltenham & Gloucester College of Higher Education (England); the Universitaire de Nancy (France) and the Universitaire de Strasbourg (France); the Athens campus of the University of LaVerne (Greece); Hokusei Gakuen University (Sapporo, Japan); the Cochin University of Science and Technology (India); and the Universidad de Barcelona (Spain). Students with Programs of Emphasis from all academic departments are eligible and course work includes a combination of classes offered exclusively to BCA participants and classes offered to all students of the host institution. Each program has a resident director whose sole responsibility is overseeing this program.

Junior Year Abroad at the University of Leeds (JYAL)

Adviser: Ms. *Wallace*

The University of Leeds offers programs to highly qualified students. Students live and study in a British setting where they can meet faculty and students not only from England, but from around the world. Students from all disciplines (and especially from the natural sciences), may participate in this program.

Summer in France

Advisers: Ms. *Wallace; Professor Henderson*

A four-week program in France, during the month of June, offers students the opportunity to earn four credits in intensive study of French language and culture. Students study language and culture in Lille, while living with a French family.

Summer in Orizaba, Mexico

Adviser: Ms. *Wallace*

In cooperation with the Instituto de Estudios Avanzados de Oriente (IDEA), Juniata offers a four-week (May-June), four-credit, intensive Spanish as a Second Language program. Students live with IDEA students and their families in Orizaba, a city in the state of Veracruz, in Mexico's industrial corridor, off the beaten path but centrally located. Three hours of daily language instruction and an elective class (selected from such topics as Ancient Civilization in Mexico, Contemporary Art in Mexico, and Mexican Culture with an Emphasis in Business) are supplemented with a range of field trips and two extended weekend trips.

Summer in Marburg

Advisers: Ms. *Wallace; Professor Jaeger*

The Philipps Universität in Marburg, Germany, a Juniata exchange partner since 1979, is the site of a three-week, three-credit German language immersion program. The program offers intensive language training, small group tutorials, lectures on a broad cultural topic (which changes from year to year), field trips and cultural events.

Other International Study

Advisers: Ms. *Wallace;* Ms. *Polte*

Juniata students may also study abroad under other programs sponsored by colleges and universities with which Juniata does not have special arrangements. Such programs must be offered by accredited U.S. colleges or universities or involve direct enrollment in an approved university outside the U.S. In either case, credit earned may be transferable to Juniata under the usual policies and requirements for the acceptance of transfer credit.

To enter these programs, students need the approval of the Director of International Programs, the Registrar, and the Dean of Students. Juniata grants-in-aid are not transferable to programs sponsored by other institutions, and students should consult the Director of Financial Planning to determine whether any other aid they are receiving is transferable. Qualifications for admission to these programs are generally the same as those for exchange and BCA programs.

International Studies Certificate

Advisers: International Education Committee members.

In the 21st Century, students must not only have strong, discipline-based training but also be prepared to live and work in a global community. The *International Studies Certificate* highlights a student's foreign language, international cultural experiences, and coursework of an international nature. Broad-based in its design and growing out of the model of the POE in International Studies, the Certificate is meant to encourage all students to add a significant international dimension to her/his academic experience. Through the judicious use of electives, the requirements of the Certificate provide an international focus for all students at Juniata, regardless of POE. While there are no GPA requirements either for entry to or achievement of the Certificate, there are GPA requirements for study abroad, and proficiency in a language implies above average work in those courses. An *International Studies Certificate* recognizes Juniata's commitment to the internationalization of the academic experience of the student. The awarding of the Certificate is noted on the student's transcript.

Intensive English Program

Juniata's Intensive English Program provides credit and non-credit English language instruction to international students who speak English as a second language. The goal of the Intensive English Program is to prepare students with the English proficiency, study skills and cross-cultural understanding they will need for academic success in an American college or university or their professional life. The program operates under the auspices of the International Programs Office in support of the broader goal of fostering internationalization and appreciation of diversity at Juniata College.

During the Juniata academic year, the Intensive English Program operates according to the semester calendar with two 15-week terms. Summer sessions are offered during June, July and August. The Intensive English Program is open to students who will matriculate at Juniata as four-year degree students as well as to those students who wish to improve their English for professional reasons or for study at other colleges or universities. Degree-seeking students may earn up to 15 credits toward their degree by completing Intensive English Program courses.

Full-time enrollment in any given term entails approximately 20-22 hours per week of courses, which include Academic Writing, Reading and Study Skills, Listening/Speaking, American Culture and Grammar. Content-based courses are offered so that students may practice their language skills while learning about American culture and other special topics. Optional courses provided according to need and interest during certain terms include Pronunciation and TOEFL Preparation. Advanced level IEP students may enroll in Juniata's academic degree program on a part-time basis. Continuing support is provided for English language skills, as needed, to international students through an individual tutoring program and the Writing Center.

In addition to intensive English language instruction, specialized programs are available on a contract basis to groups with specific English language needs. Examples of such programs include English for Business, English and the Fine Arts, Secretarial English, and English for Science and Technology.

For students interested in Teaching English as a Second Language, Juniata offers independent study, tutoring and teaching practice opportunities to students who have completed the appropriate coursework. Summer employment opportunities are also available to Juniata students interested in gaining work experience with international students and Intensive English programs.

INTERNSHIPS

An internship is a structured learning situation in which a student applies concepts learned in the classroom to an on-the-job experience. Approximately 65% of Juniata students participate in an internship. The primary purpose of an internship is to provide an academically valid pre-professional work experience for the development of the student's human, social, and management skills. Interns receive practical training in a variety of settings through cooperatively arranged placements. Interns are given responsibilities that are high quality, not menial, and interns work side-by-side with other employees. Internships may be done either for credit (typically during the junior or senior year) or as non-credit, transcript notation internships (done during the summer and usually paid).

Internships for Credit

Adviser: Director of Career Services

The primary distinction between credit and non-credit internships is the degree to which students are required to reflect on their experiences. Credit is not given for work per se. Students apply theoretical concepts in the workplace, reflect on the experience, and then reassess ideas. Hence, academic credit is earned for placing the pre-professional work experience in a conceptual and comparative context. Additional differences in the academic requirements between credit and non-credit internships include the degree of College supervision, the duration of the experience, the investment of College resources, and the student's payment for and receipt of credit.

Internships for credit may be arranged in virtually any academic area and may vary in duration and in credit earned from four credits to 15 credits per semester. (Note: A student may earn a maximum of 15 credit hours of internship while seeking a degree at Juniata.) Placements are arranged through the cooperative efforts of the student, the faculty sponsor, and the Director of Career Services. Seventy to 100 students participate in credit internships each year. Examples of the range of internships include: AIDS Health Project, Allegheny Heritage Development Corporation, Alliance to Save Energy, Altoona Curve, American Red Cross, AMP, Incorporated, Brethren Volunteer Services, Brigham & Women's Hospital - Harvard Medical School, Camp Blue Diamond, Capital, Children's Museum, Cornell Abraxas, Enterprise Rent-A-Car, FBI - DNA Analysis Unit, Fort Roberdeau Historic Society, Genzyme Corporation, Hershey Medical Center, Highmark Blue Cross Blue Shield, Huntingdon County Office of Business & Industry, J.C. Blair Memorial Hospital, Johns Hopkins University, KidsPeace, Lewisburg Federal Penitentiary, Lytle Group, National Aquarium, National Gallery of Art, National, Institute of Health, Northwestern Mutual Life, Oak Ridge Institute for Science and Engineering, PA Game Commission, PA Department of Environmental Protection, PA State Correctional Institution-Smithfield, Pittsburgh Zoo, PricewaterhouseCoopers, Raystown Country Visitors Bureau, Shaver's Creek Environmental Center, Swigart Associates, United Nations, U.S. Food and Drug Administration, PA State Senator Robert Jubelier, Walt Disney World, WPSX - TV, local law offices, medical offices, and social service agencies.

Non-Credit Summer Internships

Exciting summer opportunities are available for Juniata students in virtually every academic area, and the Director of Career Services is available to assist students in finding academically-meaningful summer positions. Students must have a minimum GPA of 2.0

to apply for a summer internship, and must submit an application and resume to be considered. With few exceptions, summer internships are not for credit, but can be officially noted on the student's transcript as an academically-valid experience. Ninety to 130 students participate in this program each summer.

The College encourages organizations to pay summer interns, and students have earned from minimum wage to $17.50/hr. To qualify for transcript notation, a summer internship should last for a minimum of 240 hours and must be related to the student's P.O.E. Each intern must be evaluated by his/her supervisor, and must make a presentation in the Fall. If the Internship is deemed appropriate and successful, the experience will be noted on the students' transcript; e.g., BI 001 Internship: Biomedical Technician, or EB 001 Internship: Retail Sales/Mktg. While most students live and work near home, many students have taken advantage of summer internships as a way to travel and live in other areas. Students have interned in locations ranging from Massachusetts to California and in organizations such as: the Pittsburgh Ballet Theater, Brigham and Women's Hospital, Johns Hopkins University, AMP Inc., Pennsylvania Department of Environmental Protection, FCI Electronics, Advanced Glass Fiber Yarns, PA House Public Works Committee, Smithfield State Correctional Institute, Mercy Regional Health System, Penn State College of Medicine, Mayo Clinic, and Purdue Vet School. Summer internships typically occur after the sophomore and junior years, but exceptional freshmen with 10 credit hours in their POE are eligible to participate.

Urban Semester Experiences

Juniata is affiliated with several urban semester internship experience programs including: the Philadelphia Urban Semester, the Washington Center, the Institute for Experiential Learning, and the Washington Semester at American University. In all these experiences, students typically earn 15 academic credits, but only a limited number of individuals may participate and approval by the Internship Committee is on a competitive basis. Program costs vary and students are responsible for any costs above and beyond tuition, room and board fees paid to Juniata. Students should plan to participate in these programs during their junior or senior year. One year international students (and other students not seeking a degree at Juniata and/or attending Juniata for one year or less) are not eligible to participate in these programs. Application is made through the Director of Career Services and a faculty sponsor is required.

Institute for Experiential Learning

Advisor: Director of Career Services

Students participating in IELs internship program work four days per week and attend the fifth day seminar to process their experiences. Students actively create and shape personal and professional learning goals by utilizing the three experiential learning components which guide the program: knowledge, activity and reflection. Past internship placements include: CNN, FAA, American Red Cross, Amnesty International, and others. Housing (excluding board) is provided.

*Participation requires approval by the Internship Committee

Philadelphia Urban Semester

Adviser: Director of Career Services

The Philadelphia Urban Semester program is open to students regardless of academic field. Through cooperation with the Great Lakes Colleges Association's Philadelphia

Center, students may spend a semester interning in Philadelphia, gaining firsthand insight and exposure into the issues and problems confronting our cities and to potential vocations. Blending theory and direct experience, each program includes as its major part a supervised internship for four days per week in business, industry, social service agencies, medical facilities, political offices, schools and other organizations. Seminars and/or research projects provide academic complements. Assistance in locating housing is provided.
*Participation requires approval by the Internship Committee

Washington Center

Adviser: Director of Career Services

Under a cooperative arrangement with the Washington Center, Juniata students may participate in internships in Washington, D.C., in nearly every academic field. Internship placement assistance is available to help students secure meaningful, relevant placements. Interns work four days per week and attend seminars, political, and cultural events the fifth day. Internship placements include public administration, congressional offices, lobbying associations, and public interest organizations like Common Cause and the Environmental Policies Center. Housing (excluding board) is provided.
*Participation requires approval by the Internship Committee

Washington Semester

Advisers: Director of Career Services, Professor Weimer

Juniata is an affiliate member with the Washington Semester Program at American University in Washington, D.C. This program provides another "urban semester" opportunity for a select number of Juniata students. Students who apply to the program and who are accepted will spend a semester in Washington, D.C. The program consists of a 2-3 day per week internship placement, two course seminars (eight semester hours), and an optional independent research project or elective course. Washington Semesters are offered in the following areas: Journalism, Justice, Economic Policy, Foreign Policy, International Business and Trade, International Environment and Development, International Politics and Diplomacy, Museum Studies and the Arts, Peace and Conflict Resolution, American Politics: National Government, and American Politics: Public Law. Housing is provided.
*Participation requires approval by the Internship Committee.

ACADEMIC PLANNING, POLICIES, AND RECORDS

ACADEMIC PLANNING, POLICIES, AND RECORDS

Academic Planning 38
- Graduation Checklist and Explanatory Notes 37
- Advising 39
- Initial Program of Emphasis and Program of Emphasis 40
- Academic Support 40
- Peer Tutoring Program 40
- Learning Disabilities 41
- Student Research and Scholarship 42

Academic Policies 42
- Registration and Drop/Add 42
- Normal Course Load 42
- Overload Policy 42
- Auditing Courses 43
- Repeating Courses 43
- Independent Study and Credit by Examination 43
- Summer Sessions 44
- Student Classification 44
- Full-time Status 44
- Transfer Credit 44
- Residency Policy 45
- Advanced Placement Credit 45
- Foreign Language Placement 46
- International Baccalaureate 46
- Academic Integrity 46
- Leave of Absence 46

Academic Records 46
- Family Educational Rights and Privacy Act of 1974 46
- Transcripts 47
- Grade Reports 47
- Grades 47
- Grade Appeals 48
- Academic Standards of Progress 49
- Academic Honors 50
  - Dean's List 50
  - Graduation Honors 50
  - Honor Societies 50

GRADUATION CHECKLIST

I. College Writing Seminar

_____ (5)

II. Cultural Analysis

_____ (4) _____ (3 or 4)

III. Communication Skills (2 courses must be writing, (CW), 2 courses may be speech, (CS); 2 in POE, 1 at 300 level or above)

_____ ( ) _____ ( ) _____ ( ) _____ ( )

IV. Quantitative Skills (three options)

_____ ( ) AND _____ ( )
Math Statistics
OR _____ ( ) OR Proficiency Exam ( )
Q

V. Distribution (6 cr. in each area; in 3 areas, 3 cr. with a prerequisite or at 300-level or above)

(F) Fine Arts _____ ( ) _____ ( )
(I) International _____ ( ) _____ ( )
(S) Social Sciences _____ ( ) _____ ( )
(H) Humanities _____ ( ) _____ ( )
(N) Natural Sciences _____ ( ) _____ ( )

VI. Program of Emphasis (45-60 credit hours, optional distinction project)

_____ ( ) _____ ( ) _____ ( )
_____ ( ) _____ ( ) _____ ( )
_____ ( ) _____ ( ) _____ ( )
_____ ( ) _____ ( ) _____ ( )
_____ ( ) _____ ( ) _____ ( )
_____ ( ) _____ ( ) _____ ( )

VII. Service Learning (optional, 4 credit maximum)

_____ ( )

Academic Planning

Notes Associated With the Graduation Checklist

The Graduation Checklist which appears on the previous page is designed to help students keep a record of their progress toward fulfilling graduation requirements. It is Juniata's intention to encourage all students to graduate within four years. The following is a series of notes explaining the various requirements.

I. College Writing Seminar

This foundation course is required of all Juniata freshmen.

II. Cultural Analysis

Students fulfill the cultural analysis requirement by completing a two-course sequence.

III. Communication Skills

In addition to the College Writing Seminar, students will take at least four "C" courses (minimum 12 credits), two of which must be writing-based and two of which may be speech-based. Two courses must be in the P.O.E. and at least one of those courses must be at the 300-level or above.

A writing-based (CW) course requires *at least 25% of the grade* be determined by one or more writing assignments that receive structured feedback on the writing by the instructor.

This structured feedback may take two forms: (1) one or more writing assignments that require rough drafts to be reviewed and commented upon by the instructor; or (2) based on multiple assignments where earlier graded, commented upon assignments are returned to students before later assignments are due. Either option may pertain to an individual or a group of students.

A speech-based (CS) course requires *at least 25% of the grade* be determined by two or more oral individual or group presentations, and it fulfills two requirements: (1) The course aims to develop rhetorical skills necessary for effective and creative speech in individual, group or public presentation. This may include one or more of the following: speech design and delivery, listening, negotiation, leadership, persuasion, collaboration, or decision making; (2) The course offers students at least two opportunities to demonstrate these skills. Evaluation of the first opportunity guides improvement of the second.

IV. Quantitative Skills

To demonstrate quantitative literacy, students have three options: (1) complete a "Q" course; (2) complete a mathematical course (QM) and a statistics course (QS); (3) pass a proficiency exam. Students may use these courses in their POEs.

V. Distribution

Students must complete six credits in each of five categories: Fine Arts, International, Social Sciences, Humanities, Natural Sciences. In three of these five areas, at least three credits must have a prerequisite or be numbered at the 300-level or above. Distribution courses may count in a student's POE.

VI. Program of Emphasis

The Program of Emphasis (POE) must include 45-60 credits, with higher limits pos-

sible for interdisciplinary POE's. At least 18 credits must be at the 300-level or above. No more than two courses and a maximum of 15 credits in the POE can be research, internship, or independent study. Degree seeking, one-year international students must have 14-16 Juniata credits in their POEs.

Distinction in the POE

To receive distinction in the POE, students must complete a senior experience that integrates several areas of their POE. This requirement can be fulfilled in many ways. Some possibilities might include an original independent creative project that involves significant academic work, such as laboratory research resulting in a significant report; a major paper on a well-defined project; a body of artistic work equivalent to a major exhibition or performance; or field experience (e.g. student teaching and certain internships) culminating in a significant report. The project and number of credits must be approved and evaluated by two faculty members. To achieve distinction in the POE, the project must be judged worthy by the evaluating faculty members, and it must be presented in a forum open to all interested parties, either at Juniata or to an outside audience such as the National Conference on Undergraduate Research (NCUR).

The Curriculum Committee shall establish minimum qualifying standards for students wishing to engage in the senior experience. Departments and programs will be free to establish further requirements.

VII. Service Learning (optional)

Students who perform an average of two hours of community service per week may earn one credit per semester, for a maximum total of four credits. Students who choose this option must complete an orientation workshop and reflect on connections between the experience and their coursework. Credit is awarded on a pass/fail basis.

STUDENTS ARE RESPONSIBLE FOR ENSURING THAT ALL GRADUATION REQUIREMENTS ARE COMPLETED.

Advising

Faculty advisers are an invaluable source of support for students. At the time of enrollment, first-year students are assigned a Freshman Adviser who assists in orienting new students to College academic policies and procedures. By the end of January of their first year, students choose two faculty advisers: a program adviser to assist specifically with POE and career issues, and a liberal arts or general adviser to assist with general academic issues such as fulfilling graduation requirements. The liberal arts or general adviser teaches in a discipline outside of his or her student advisee's Program of Emphasis. Those students who do not choose a general adviser by the appointed deadline will have one assigned to them. For exploratory students, advisers can help identify potential areas of interest. At any time, students may change advisers, subject to approval of the Registrar, as long as one adviser is from the department most prominently represented in the Program of Emphasis (POE). Students pursuing dual fields of study should select one adviser from each area.

Advising is a crucial form of guidance for all students, especially for those individuals pursuing highly structured academic programs.

During summer orientation, incoming freshmen work individually with faculty advisers in their area of academic interest to select and register for fall semester courses. On the first day of classes, first-year students meet with their Freshman Advisers to review course registration and make adjustments as needed.

Initial Program of Emphasis (IN-POE) and Program of Emphasis (POE)

During the spring semester, freshmen meet individually with both their advisers to plan the IN-POE. In the absence of traditional majors, the IN-POE and later the POE serve to guide students in planning their academic programs of emphasis. The process of drafting the IN-POE provides the student with the opportunity to consider his or her academic and career goals, and to identify carefully those courses that will provide the background, skills, and perspective needed to achieve those goals. Students complete the IN-POE prior to selecting courses for the following year, an opportune time to consider these issues and plan coursework. When both advisers are satisfied with the content and course selection of the IN-POE, students submit the document to the Registrar for approval. Failure to submit the IN-POE can result in academic probation.

The IN-POE is valid only until the spring semester of the sophomore year. Prior to selecting courses for the following year, students are asked to complete a more detailed academic plan, the regular POE, using the IN-POE as a guide. In addition to enumerating academic and career objectives, at this point students are asked to sketch out a complete set of courses totalling 45-60 credits, and to explain how each course or set of courses contributes to the overall goals listed. Again, adviser-approved POEs are submitted to the Registrar.

Between the spring of a student's sophomore year and the fall of his or her senior year, a student may very well change his or her career plans and embark on a new Program of Emphasis. In cases where the newly chosen POE differs significantly from the approved POE, a student must again complete the POE paperwork for the new program. If the new program differs by only a few classes, a minor POE change form may sufficiently update the paperwork.

In the fall of the senior year, students are asked once again to review the POE they have on file. Again, changes can be made either by drafting an entirely new POE or by completing a minor POE change form. In some instances, the POE completed sophomore year will remain accurate and no changes are needed. The final document, due in the Registrar's Office on or prior to preregistration for the spring semester, is considered a contract between the student and the College; students who do not complete the courses they have listed or who do not have a POE on file, are considered to have failed to meet degree requirements and will not graduate.

Academic Support

Juniata students may receive assistance with academic coursework in a number of ways. Through the Office of Academic Support Services, students may receive general academic counseling and study skills guidance on topics such as note taking and exam preparation. The campus-wide peer tutoring system offers individualized or group tutoring assistance with material in a particular course. Similarly, by visiting the Writing Center students may receive individual help on written assignments for any class. Students may take advantage of the Baldridge Reading Program, at additional cost, during the spring semester to improve their reading comprehension and rate.

Peer Tutoring Program

Juniata offers a popular, campus-wide program of peer tutoring. Peer tutoring is available in any offered course to each student who desires additional help with subject mate-

rial. Before requesting tutoring assistance for a course, students must discuss their academic performance with the course instructor and ask for his or her verbal permission; some faculty would prefer to work with a student during office hours before tutoring begins. In select courses, tutoring is offered in the form of group review sessions, and there are also small group tutoring opportunities in which two or more students work with a peer tutor.

A reasonable amount of tutoring is available at no charge to the student, but the number of hours of tutoring per week may not exceed the amount of time spent in lecture each week (three to fours hours/week would be the maximum).

Request for tutoring is seen as a commitment from the student asking for assistance and is an obligation that requires consideration and motivation. Tutees are expected to arrive at prearranged meetings appropriately prepared and to notify tutors when they are unable to make an appointment. A tutee who fails to show up for prearranged meetings more than two times will have his or her tutoring privileges revoked for the remainder of the semester.

Students/tutees understand that tutoring is a supplement to class preparation, class attendance, and faculty office hours assistance–it is not intended to replace any of these critical academic responsibilities. Students who are motivated to get the most out of tutoring find that the program is very successful for them.

All tutors have faculty recommendation, must make application for the position, and have an interview with the Director of Academic Support Services. In addition, each tutor must attend two hours of training per semester to maintain the program's integrity and to help tutors maximize their tutoring skills.

Learning Disabilities

The Dean of Students shall be responsible for carrying out the policy regarding services to students with special needs. All prospective students requesting information concerning support for the learning disabled will be provided with the Statement of Learning Disabilities and offered the opportunity to meet with the Dean of Students as part of the pre-admission process.

Students with learning disabilities who are admitted to the College shall be asked to provide documentation in support of the specific learning disability. The documentation shall remain confidential and be kept on file in the Dean of Students Office. At no time will anyone, other than the Dean of Students and the learning disabled student have access to the documentation. However, the individual student may elect to share the information with whomever he/she chooses at any time.

The Dean of Students will act in the role of advocate for learning disabled student upon admission to Juniata College. Section 504, Subpart E, of the Vocational Rehabilitation Act of 1973 (PL 93-112) will serve as the basis for that advocacy.

More specifically, a student with a documented disability will be guaranteed certain accommodations (i.e.; additional time in testing situations) as outlined in his/her own learning disabilities evaluation/assessment document which must be provided to the College by the student upon his/her request for learning-disability status.

Students who elect to be evaluated for a learning disability after having been accepted at the College will assume financial responsibility for the expenses incurred. The Dean of Students will assist the student in the process of finding the appropriate resources for the evaluation/assessment.

Student Research and Scholarship

In preparation for graduate work, students are encouraged to engage in independent research projects as part of an independent study or internship or as a member of an upper level research-oriented course. All students conducting research are encouraged to present their work in a public forum such as the annual National Conference on Undergraduate Research (NCUR). Funding for instruments, supplies, and travel is available through application to the Scholarship Committee or the Von Liebig Summer Biomedical Research Scholarship Program. Interested students should contact any of the following Scholarship Committee members: Professors Barlow, Belser, Drews, Gooch, Reingold, Richardson, Weimer, or the Registrar.

Students with strong records of academic achievement are encouraged to consider competing for national fellowship awards such as the Rhodes, Fulbright, Goldwater, and Marshall Scholarships, and the Mellon Fellowship. Students with meritorious records are contacted by members of the Scholarship Committee and mentored through the application process. Most applications are due early in the senior year. Interested students should contact a member of the Scholarship Committee.

ACADEMIC POLICIES

Registration and Drop/Add

Normally students preregister for classes midway through the previous semester, but registration changes can be made during the first seven class days of each semester, known as the drop/add period. During this period students may adjust their schedule by adding and/or dropping classes, and latecomers can register for the semester. Students make changes to their schedules with advisers' approval.

Normal Course Load

The normal course load for freshmen and upper-class students is 30 semester hours of credit per academic year. Normally students who complete an average of 15 credits per semester graduate in four years. Freshmen often opt to take lighter loads during the first few semesters and heavier loads later. Any course load above 18 credits per semester is considered an overload.

Overload Policy

In special cases, an upper-class student may register for an overload. An overload charge is made for all credit hours attempted above 18 per academic semester. The upper-class student who wishes to take more than 19 hours of credit must have an outstanding academic record, including satisfactory completion of all courses attempted and must obtain by petition the consent of the Student Academic Development Committee. No student may take more than 21 credit hours per semester.

Excluding advanced placement credit, freshmen normally are not permitted to receive credit for more than 34 credit hours that academic year. A freshman may take more than 18 semester hours of credit only during the second semester and must fulfill two special requirements: (a) satisfactory completion of all first semester courses attempted, and (b) approval by advisers and/or other appropriate faculty as determined by the Registrar.

If a student registers for an overload and then withdraws from the College, a refund will be made according to the refund policy explained under Student Finances. No refunds are given for course withdrawal from an overload after the drop/add period. Some courses extend over more than one term. All courses must be completed, however, within one academic year, not including the summer. All special arrangements for programs must be made in the Registrar's Office.

Auditing Courses

Persons who wish to audit classes may make arrangements with the Registrar to attend one or more courses without receiving grades or credit. The decision to audit a course must be made by the end of the drop/add period. The transcript does carry notations of audited courses. Permission of the course instructor is necessary and an auditing fee must be paid in the Business Office. This fee is waived for students enrolled in a regular full-time College program, but occasional academic course fees remain in effect (lab and field trip fees, etc.).

Repeating Courses

Students who wish to repeat courses for which they have already received credit must obtain the permission of the Registrar. Although credit may not be granted twice for a particular course, in cases where a course is repeated both grades will be used to calculate final grade point average.

Independent Study and Credit by Examination

A student may wish to pursue studies not listed as course offerings. In such a case, independent study may be appropriate. Requests for independent study are handled by the Curriculum Committee through the Registrar's Office.

Students applying for an Independent Study must make arrangements with a faculty member and register for the course (using forms available in the Registrar's Office and on the intranet) two weeks prior to the semester in which the credit will be earned. The instructor will designate a syllabus, text, or other materials required and will submit to the Registrar an explanation of course requirements (i.e., examinations, papers, and faculty-student conferences). A student may enroll for no more than two Independent Studies in a semester. An Independent Study is considered an upper level course; no more than two Independent Studies are permitted in a POE.

Students may be given credit for some courses without participation in class meetings but by meeting all other requirements of the courses. To determine if a course is available for Credit by Examination (CBE), the student should consult the faculty member who is currently teaching the course. If the course is not currently offered a faculty member who has taught the course at least once in the last three years may conduct the course on a CBE basis. A course may be offered CBE only to full-time Juniata students. CBE is intended to be used as an option when scheduling conflicts prevent a student from scheduling a course required for graduation, which will not be available in any other semester prior to their graduation and cannot be fulfilled by any other course. The decision to offer a course CBE rests solely with the faculty member responsible for the course, since not all courses lend themselves to Credit by Examination (e.g., courses dependent on discussions and field trips and laboratory courses). The faculty member currently responsible for a course is NOT obligated to offer the course CBE in a given semester, as each faculty

member must consider their own previously scheduled work load. The deadline for CBE registration is the end of the drop/add period during the semester in which the course is to be taken. Independent Study and CBE courses are considered part of the normal load of a student and, if taken as an overload, are subject to the usual overload fee.

During the Summer Session, a student may register for one Independent Study, Credit by Examination, or Tutorial if enrolling concurrently in one regularly offered course.

Summer Sessions

Juniata conducts a Summer Session program designed for a wide variety of students. The course offerings are a subset of those offered during the regular year and are similarly rigorous. During Summer Session, the normal class load is three to six semester hours per four-week term.

Student Classification

A student's class is determined by the number of semester hours completed in accordance with the following:

Freshman	up to 23.99 credit hours
Sophomore	24 up to 53.99 credit hours
Junior	54 up to 86.99 credit hours
Senior	87 and above credit hours

Full-time Status

A student is regarded as full-time if he or she registers for 12 or more hours of credit in each academic semester. A student who in the course of the semester considers dropping his or her credit load below 12 credit hours should confer with advisers and/or Student Financial Planning to discuss the consequences of this action.

Transfer Credit

Transfer credit is granted only for academically-valid courses in which the student earns a grade of C- or higher. Transfer credit is granted in the form of a comparable course, distribution credit, or elective credit. Credit is only awarded for courses taken at a similarly accredited institution.

Current students wishing to transfer credit back to Juniata must obtain pre-approval by completing a "Request for Clearance of Transfer Credit" form available in the Registrar's Office. On this form, the appropriate department chair will note the comparable Juniata course(s) (consulting as needed with the most recent instructor of the comparable course), and the student's advisers will indicate approval. For courses not deemed comparable with a Juniata offering, decisions will be made by the Registrar with advice from the appropriate department and the Student Academic Development Committee as appropriate. It is the student's responsibility to obtain information about the course and present this information to advisers and the department chair(s).

Students who enter Juniata with fewer than 24 credit hours may apply no more than 15 transfer credits toward a Juniata degree after their initial entry. No more than eight of these 15 credits can be included in the POE. Students who enter Juniata with 24 or more credit hours may transfer credit according to the following chart.

# of credits awarded upon entry	total # transfer credits allowed after entry	# transfer credits allowed in POE after entry
0 - 23.99	15	8
24 - 53.99	9	4
54 - 86.99	6	0
87 or more	0	0

Exceptions may be made for students participating in cooperative programs, study abroad programs, and other Juniata-approved programs. Students who have earned an associate degree elsewhere are awarded credit as indicated in the Admission section of this catalog.

Special Transfer Programs

Articulation agreements are in place between Juniata College and Harrisburg Area Community College (PA), Cambria County Area Community College (PA), Keystone Junior College (PA), and Community College of Allegheny County (PA). Credit evaluations can be accommodated through the Registrar's office. While these agreements provide for transfer into Juniata as a junior by awarded credits, specific Programs of Emphasis (POEs) have requirements that may affect how individual courses are treated when transferred from another college. Contact the Enrollment Center or the Registrar's office for more information.

Residency Policy

Students are allowed to transfer credits during their last semester within the provisions of the transfer policy above. However, 30 of the last 36 credits must be taken in residence. There are degree requirements that are unique to Juniata and may not be completed elsewhere. Students participating in cooperative programs, study abroad programs, and other Juniata-approved programs are considered to be in residence.

Advanced Placement Credit

Juniata encourages students to pursue additional credits through the Advanced Placement process. Incoming freshmen with scores of 4 or 5 on an Advanced Placement test may be offered Juniata credits. Selected Advanced Placement tests have been designated by the appropriate academic programs as equivalent to one or more Juniata courses. If the student accepts Advanced Placement credit for such a test, the student is then exempt from taking the equivalent course(s) and in fact may not take the course(s) for additional credit. If an Advanced Placement test is not designated equivalent to a Juniata course or courses, general credits in the appropriate division (Natural Sciences, Social Sciences, Arts and Humanities) may still be offered.

To receive advanced placement credit, the student must first meet with the appropriate department chair or a faculty member so designated by the chair to consider the advantages and disadvantages of the student's accepting the credit. Where possible, the faculty member will have available the student's prior academic records at the time of this meeting. After this discussion, the student will have the option of accepting or not accepting advanced placement credit. A student who receives a sufficient number of Advanced Placement credits will be granted sophomore status.

Foreign Language Placement

In foreign languages, students are placed at the appropriate college level based on their years of high school language or a placement exam.

International Baccalaureate

International Baccalaureate Diploma recipients are granted credit for one full year (30 credits) toward a degree at Juniata. Students who have an IB Diploma normally enter the College with sophomore standing. IB certificate recipients receive course credit for each examination passed with a score of 5 or higher. To receive this credit the student will meet with the appropriate department chair or designee to consider the advantage or disadvantage of accepting credit. IB credits may be counted toward degree requirements.

Academic Integrity

All members of the Juniata community share responsibility for establishing and maintaining appropriate standards of academic honesty and integrity. Students oblige themselves to follow these standards and to encourage others to do so. Faculty members also have an obligation to comply with the principles and procedures of academic honesty and integrity. Academically dishonest acts include cheating, fabrication and falsification, multiple submission, plagiarism, abuse of materials, and complicity in academic dishonesty.

All offenses are reported to the Director of Academic Support Services and all confirmed violations of the policy are kept on file for a minimum of five years or until the student is separated from the College, whichever is longer. A faculty member has discretion to recommend a sanction or the case may be referred to the Academic Judicial Board. If a student is accused a second time, the case is automatically referred to the Academic Judicial Board. Penalties may include, but are not limited to, the following: a formal warning; a reduced grade for the assignment; a reduced grade for the course; suspension from the College; dismissal from the College.

Leave of Absence

Students who want to pursue a program of study at another institution, engage in other off-campus educational experiences, or plan a personal program of development without severing their connection with Juniata may request a leave of absence. A leave of absence is granted by the Office of the Dean of Students in consultation with the Registrar only to those in good academic standing at the end of a semester and only for a limited time. The maximum period for a leave is one year.

A student who plans to take a leave of absence should consult the Registrar, Student Financial Planning, and Student Services staff to learn the policies which apply to leaves of absence. He or she is reminded of the transfer policy.

ACADEMIC RECORDS

Family Educational Rights and Privacy Act of 1974 (otherwise known as The Buckley Amendment)

Juniata adheres to the Family Educational Rights and Privacy Act of 1974 as amended. In brief, the Act entitles parents of dependent students or eligible students the right

to inspect and review the student's educational records. Parents of dependent students or eligible students have the right to contest inaccurate or misleading information in the records. The school must have written permission before releasing information from a student's record. ["Section 4.1 *Disclosure of Educational Records Information*-3.d, permits colleges to share educational records or components thereof without the written consent of students to "other school officials within the institution determined by the institution to have a legitimate educational interest (Chapter 5.3)."]

Transcripts

The Registrar's Office maintains a complete record of a student's academic work. This record is available for inspection by the student or parents of dependent students. For purposes of employment, transfer or further study, the student may request in writing that an official transcript of the record be sent to an individual or institution. Official transcripts are for the use of a third party and bear the College seal. Unofficial transcripts are for personal use by the student and bear no seal.

No transcript of a student's permanent record will be issued without written authorization from the student. No telephone or third-party requests will be honored. Members of the faculty or administration may have access to the records if they have a legitimate interest in and demonstrate a need for the information.

Grade Reports

Grade reports will be issued to students by the Registrar at the conclusion of each semester. All grade reports are sent to the student at his or her permanent address. Advisers are notified of all advisees placed on probation, suspended or dismissed.

Grades

Grades are awarded according to the following scale.

A indicates work of the highest excellence, showing a superior grasp of content as well as independent and creative thinking in the subject.

B signifies unusual achievement wherein the student reveals exceptional insight and ability.

C is given for satisfactory achievement on the college level where the work in the course has been conscientious and shows no considerable deficiency in either quality or quantity.

D indicates that the work in the course is below the quality normally expected for college work, but is only marginally so.

F signifies work which is distinctly unsatisfactory at the college level.

The above grades may be qualified by the use of a plus(+) or a minus(-). For the permanent record, a grade point average (GPA) is compiled and the GPA appears on the transcript. The following equivalents should be used for calculating the GPA:

A	4.00	C	2.00
A-	3.67	C-	1.67
B+	3.33	D+	1.33
B	3.00	D	1.00
B-	2.67	D-	0.67
C+	2.33	F	0.00

Performance in a few courses is graded S (satisfactory) or U (unsatisfactory), but in the majority of courses, the grades listed above are given. Only grades of A(-), B(+,-), C(+,-), D(+,-), and S are given credit toward a degree.

In addition to the regular grade designations, the following irregular grades are used as occasion may demand:

I (incomplete). At the discretion of the faculty member involved, a grade of incomplete may be submitted. This option is to be used sparingly, however, and only when the student has given a satisfactory explanation (such as extended illness or accident) for failure to complete a required piece of work. Otherwise, a student receives an F for a course which is not completed. Simple preference on the part of the student for an extension of time is not regarded as sufficient cause for granting an incomplete. Upon the granting of an incomplete, the student must complete the work within three weeks of the beginning of the next semester of the academic year or an F automatically will be recorded. Any exceptions to this policy must be approved in writing by both the instructor and the Registrar.

W (withdrawal). Withdrawals from a course will be permitted up to the scheduled date (usually near the midterm date of the semester) with permission of the student's advisers. Withdrawal after that date will not be permitted except in unusual circumstances requiring written approval of both advisers and the instructor. No withdrawals are permitted after 5:00 p.m. of the last day of classes each semester. Unofficial withdrawals from all courses are recorded as Fs. Withdrawals from class are considered unofficial if the student fails to make satisfactory arrangements in the Registrar's Office.

If students withdraw from all classes (withdrawal from the College), they must apply to the Student Academic Development Committee through the Registrar to be readmitted.

Grade Appeals

The assignment of grades for academic work is an important matter which falls within the professional responsibility of each individual faculty member. Grades are determined in such a way as to reflect as accurately as possible student performance according to criteria available to the student and to protect the academic freedom both of the faculty member and the student. There is an inherently subjective element to grading, but it does not follow from this that grading is done in an arbitrary fashion.

A student may dispute a grade given in or for a course. When this occurs, the student should follow the appeal procedure outlined below. The faculty member issuing the grade has final authority and responsibility for determining that grade.

1. Within two weeks of the time the questioned grade is received, the student should talk to the faculty member who assigned the grade and attempt to resolve the issue.

2. If the course is team taught and no resolution is achieved, the student may request, where course policy permits, a second faculty opinion from another section leader in the course selected by the director of the course. If this is permissible and the opinion of the second leader differs from the opinion of the first in the disputed grade, the course syllabus or past practice in the course should specify how these different opinions are resolved. Where there are recognized past practices, these should be included in the course syllabus.

3. If no resolution of the grade dispute is achieved after steps 1 or 2, the student should discuss the matter with the department chairperson or course director. In this case, the function of the chairperson or director is to attempt to determine the relevant facts and mediate the disagreement.

4. If no resolution is achieved at step 3, the matter may be referred by the student or the faculty member to the Provost, whose function it is to mediate the disagreement. The Provost will confer privately with the faculty member and the student and may call addi-

tional witnesses. Following this process, the faculty member communicates to the student the final decision. This step is the final step in the appeal process.

5. It is expected that a final decision will be made within four weeks of the time the questioned grade is received. All parties are requested to adhere to the deadlines.

Academic Standards of Progress

The maintenance of good academic standing requires students to meet several standards.

Any student whose semester or cumulative grade point average at any time falls below 1.00 may be academically dismissed.

Any student whose semester grade point average falls below 1.66 at any time will be placed automatically on academic probation. In addition, any student whose cumulative average falls below those in the following table will be placed on academic probation. In addition to meeting the grade point average requirements, students must show appropriate progress toward degree completion. Full-time students must successfully complete 24 academic credits prior to the beginning of the third semester; 48 academic credits prior to the beginning of the fifth semester; and 72 academic credits prior to the beginning of the seventh semester. Any student failing to meet these standards is placed on Academic Probation and is required to complete 12 credits in the subsequent semester. Failure to complete 12 credits (in the subsequent semester) results in suspension or dismissal. A second failure to meet these standards of progress will result in suspension or dismissal. Students have the right to appeal suspension and dismissal.

Credit Hours Attempted	Grade Point Average
0 - 35.99	1.66
36 - 61.99	1.80
62 - 89.99	1.95
90 or more	2.00

Students on Academic Probation will be evaluated at mid-term to determine adherence to Academic Probation contracts. Students failing to meet requirements of Academic Probation contracts may be suspended or dismissed at mid-semester. Students have the right to appeal suspension and dismissal. Students on probation must achieve good standing in the next semester or face suspension or dismissal. In addition, any student who accumulates three semesters of probation will be suspended or dismissed. Also, any student on academic probation will be counseled regarding possible limitation or curtailment of his or her participation in co-curricular and/or employment activities. Students who have not satisfactorily completed the College Writing Seminar course by the end of the sophomore year are automatically dismissed. Academic Standards of Progress are established by the faculty and monitored by the Student Academic Development Committee in conjunction with the Registrar.

The implementation of probationary requirements and the determination of the fulfillment of graduation requirements are duties of the Registrar. Notification of any actions comes from that office and are sent to a student's parents unless the student signs a form preventing such notification. Development and interpretation of policies are the function of the Student Academic Development Committee.

Academic Honors

Dean's List

At the end of each semester, the Provost announces the Dean's List. Matriculated students are named to the Dean's List when:

1) they have taken at least 12 graded credits,
2) they achieve an average of 3.60 or better, and
3) they have no unsatisfactory grades.

A notation of Dean's List achievement appears on the transcript.

Graduation Honors

Honors are conferred at commencement ceremonies according to the following grade point average scale:

summa cum laude	3.90-4.0
magna cum laude	3.75-3.89
cum laude	3.60-3.74

Honor Societies

The Juniata College Honor Society is a group of junior and senior students elected on the basis of outstanding academic achievement and leadership ability. Other honor and honorary societies on campus also recognize students for their accomplishments: Beta Beta Beta (biology), The Masque (theatre), Phi Alpha (social work), Pi Sigma Alpha (political science), Psi Chi (psychology), Sigma Iota Rho (international studies), Sigma Pi Sigma (physics), and Tau Pi Phi (economics and business administration).

CO-CURRICULAR LIFE

CO-CURRICULAR LIFE

Co-Curricular Transcript 53
Community Service 53
Campus Activities 53
Student Government 53
Juniata Activities Board 54
Juniata Residence Hall Association 54
Student Organizations 54
Orientation 55
Religious Life 55
Cultural Events 55
Athletics and Recreation 55
Residence Hall Life 56
Residence Hall Staff 56
Residence Hall Programs 57
Living Options 57
Campus Services 57
Health and Wellness Center 57
Career Services 58
Dining Services 58
Mail and Banking Services 58
Safety and Security 59
ID cards 59
Firearms 60
Standards of Student Conduct 60
Alcohol 60
Drugs 60
Sexual Harassment 61
Reasonable Accommodations 61
Students with Disabilities 61

Co-Curricular Life

Juniata subscribes to a holistic approach to student development. We are a small, close learning community preparing students for usefulness and service through intellect, imagination and basic values. To that end, the Student Services Staff works with and supports the faculty to provide conditions which will promote learning and personal development. Specifically, the Student Services Staff works to create a safe learning environment that offers opportunities for students to be involved in activities and programs; an environment free from harassment; an environment that values and supports diversity; and a community in which individuals treat one another with civility, respect and compassion.

CO-CURRICULAR TRANSCRIPT

Students are encouraged to utilize a Co-Curricular Transcript (CCT) to document and validate their out-of-class experience. The CCT process enables students to structure their personal development outside the classroom by matching individual needs and goals with available experiences to stimulate growth and learning in specific areas. The CCT documents a student's leadership and involvement in student services programming and provides an opportunity for the student to reflect on his or her development outside the classroom. Information and materials to start a CCT are available in the Career Services Office.

COMMUNITY SERVICE

Community Service at Juniata is expansive and encouraged. Academic credit is offered for participating in the Service-Learning course (please see the Non-Departmental course section of this catalog for more information). Students participate in service projects primarily through four service clubs: Circle K, Habitat for Humanity, J.C. Outreach, and Phi Alpha. Most student organizations participate in service projects throughout the academic year. During Spring Break, Habitat for Humanity offers the Collegiate Challenge where college students all over the nation come together to work on specific building projects. Also, sponsored through the Campus Ministry Office is the Service-Leadership trip. A domestic trip and an international trip alternate yearly. Recent trips include New Mexico, Haiti, inner-city Pittsburgh, and Honduras. The 2000-2001 trip is planned for the Appalachian Mountain project.

CAMPUS ACTIVITIES

With the vast majority of students living on or near campus, Juniata supports a busy and varied calendar of campus activities. Under the guidance the Office of Campus Activities, many student organizations are active in the planning and implementation of these events. There are three student organizations that are primarily responsible for student life:

Student Government

Elected by the students, the members of Student Government represent the interests and concerns of the student body in a variety of ways, such as serving as student representatives on faculty and trustee committees. In addition, Student Government recom-

mends and periodically evaluates student life policies and administers the allocation of funds to student organizations.

Juniata Activities Board (JAB)

JAB's mission is the planning and implementation of a broad spectrum of social, cultural, educational and recreational programming. Comprised of a variety of sub-committees, JAB is responsible for coordinating major special events (Mountain Day, Springfest, Madrigal Dinner, Homecoming Weekend, All-Class Night, Family Weekend, and May Day Breakfast). In addition, JAB organizes a variety of other events including films, live music, comedy performances, and trips.

Residence Hall Association (RHA)

All residents are members of the Residence Hall Association and can get involved through RHA committees and activities. Each hall has a Community Board that consists of a President, Vice President, Treasurer, and a Secretary elected from the hall and is advised by the hall's RD. Two representatives from each Community Board sit on the RHA assembly.

The RHA, working in conjunction with the Community Boards of each residence hall, offers programs in the halls that foster community living and encourage learning. Also, the RHA provides a voice for students living in the halls on matters such as the development of residence hall policies.

In addition to these organizations, there are many other student clubs and organizations that are active in the life of the College. Active organizations during the 1999-2000 academic year included:

Alfarata
Alternative Ways of Loving
Arts Alliance
Baha'i Club
Brethren Student Fellowship
Campus Ministry Board
Catholic Council
Caving Club
Center for Conflict Resolution
Chemistry Club
Chess Club
Circle K
Class of 2000
Class of 2001
Class of 2002
Class of 2003
Cloister Community Board
College Republicans
Communication Club
Computer Society
Criminal Justice Club
Conservation Club
Culture Board
Dance Ensemble
East/Off-Campus Community Board
Emergency Services Club
English Club
Environmental Science Society
Equestrian Club
Fellowship of Christian Athleres
Feminist Majority Leadership Alliance
French Club
Geological Society
Habitat for Humanity
Health Occupations Students Association
International Club
Japanese Club
JC Outreach
Jeet Kune Do Club
Judo Club
Juniata Activities Board
Juniata Area Gamers Guild
Juniata Association of Musicians
Juniata College Downhill
Juniata Instructors of the Future
The Juniatian
Karate Club
Koinonia Student Fellowship
Kvasir
Lacrosse Club
Laughing Bush
Legal and Public Affairs Club
Lesher Community Board
Model United Nations Club
Musical Theater Club
Native American Hobbyist Club
Peace and Conflict Studies Student Organization
Pep Band
Phi Alpha
Psi Chi
Residence Hall Association
Sherwood Community Board
Skulldiggers
Society of Physics Students
South Community Board
Spanish Club
Student Government
Student Health Advisory Committee
Students of Business
Sunderland Community Board
Tri-Beta
Tussey-Terrace Community Board
Ultimate Frisbee Club
United Cultures of Juniata College
Voice! Activists for Human Rights
Weightlifting Club
WKVR-Power 92
Wrestling Club

Orientation

The Summer Orientation program consists of parallel programs for new students and their parents. The orientation program includes faculty advising for class registration, discussions on residential living, and sessions on various other adjustment concerns. Parents meet in groups with college administrators and faculty to share concerns, discuss services available to both students and parents, and participate in question-and-answer sessions. Students participate in a variety of informational and social activities designed to help them become more familiar with college life and the unique traditions and opportunities at Juniata. Recreational opportunities are also a part of the Summer Orientation program.

Prior to the first day of classes, new students consult with advisers, confirm their course registration, meet with Residence Staff, and participate in planned college activities to inaugurate the new academic year.

The College also provides special orientation programs specifically designed for the following distinct student groups: transfer students, program for area residents (PAR students), and international students.

Religious Life

Although Juniata is chartered as an independent college, it was founded by members of the Church of the Brethren and traditionally has recognized the importance of the spiritual dimension as a part of individual growth. Through the campus ministry office, the College encourages students to integrate their faith and vocational direction and offers opportunities to become involved in meaningful religious activities. Campus worship opportunities include weekly Catholic Mass and regular interdenominational services. In addition to regular worship, there are weekly opportunities for students to meet for Bible study, prayer, and fellowship. Juniata also has several active denominational and interdenominational religious clubs. Juniata's religious programs are guided by the Chaplain, campus ministry staff, and several student leaders. The Juniata student body reflects a diversity of religious faiths and the local community provides regular worship opportunities for Protestant, Eastern Orthodox, and Roman Catholic students. The Stone Church of the Brethren, which is adjacent to campus, and a meditation room on campus, are available for private meditation. Worship services are conducted in the community on high holy days for Jewish students by the Jewish Student Association.

Cultural Events

A variety of outstanding cultural events is available for both the entertainment of the students and the enrichment of their college experience. Professional touring artists provide drama, dance, and vocal/orchestral music as a part of the annual Artist Series sponsored by the College.

In addition, a comprehensive series of artistic programs is produced by the Music Department and the English, Communication, and Theatre Arts Department. Some involve students only, while others involve faculty and visiting artists. Art exhibits are displayed in the Shoemaker Galleries under the sponsorship of the Art Department.

Contemporary, classical, and international film series are presented several times a semester in Alumni Hall.

ATHLETICS AND RECREATION

The commitment of the Juniata College Athletic Department is explicitly linked to the educational mission of the institution. Juniata athletics emphasizes fair play and

sportsmanship co-existing with a high degree of competitiveness in all varsity programs. Such competitiveness applies as well to the academic efforts of Juniata student-athletes. Care is taken to assure the overall health and well-being of students in and outside of the training and competitive arenas. The dynamics of equitable and fair treatment of men and women within Juniata athletics is thoroughly examined and pursued.

The College promotes recreation, physical activity, and athletic programs for all students. Sixteen intercollegiate varsity sports are offered-for men: baseball, basketball, cross country, football, soccer, track and volleyball; for women: basketball, cross country, field hockey, soccer, softball, swimming, tennis, track and volleyball. In addition, clubs compete in a variety of sports including men's and women's rugby, men's and women's judo, men's lacrosse, and wrestling.

Intramural programs include, for men: racquetball, basketball, volleyball, softball, and tennis; for women: basketball, handball, racquetball, volleyball, softball, and tennis. Co-recreational intramural opportunities include volleyball, softball, racquetball, indoor soccer, ultimate frisbee, wally ball, and water volleyball.

Juniata holds membership in the National Collegiate Athletic Association (NCAA) and the Middle Atlantic States Collegiate Athletic Conference (MAC), and complies with the Division III eligibility requirements of these organizations.

The Kennedy Sports+Recreation Center includes a six-lane, 25 meter natatorium, a fully equipped 5,500 sq. ft. Fitness Center, nautilus equipment, sauna and training room, and facilities for badminton, weight training, running, wrestling and martial arts, handball, racquetball, and basketball.

Beyond the facilities explicitly provided by the College, the Huntingdon area is rich with opportunities for fishing, hunting, hiking, boating, canoeing, rafting, swimming, camping, picnicking, downhill and cross-country skiing and golf.

RESIDENCE HALL LIFE

Juniata is a residential campus committed to the notion that residence hall experiences complement the formal instructional program. In the residence halls, students can apply concepts studied in the classroom to group living situations and deal with citizenship and self-determination issues. Guidelines for residence hall living are provided in detail through the campus computer network, *EagleNet*, in the student handbook, *The Pathfinder*; and in its periodic supplement, *The Student Services Newsletter*.

With a limited number of exceptions, students are expected to live in College-owned facilities. To secure permission for off-campus housing, arrangements must be made in the prior spring and approval is based on the number of spaces available on campus. Students will not be permitted to move off campus during the academic year. Upper-class residential students choose their rooms on the basis of seniority and class rank. To enhance integration into the College community, freshmen are assigned rooms inter-mixed with those of upper-class students.

Residence Hall Staff

Juniata is committed to providing the best possible living experience in the residence halls. This begins with qualified, caring, and well-trained staff. Staff members in each building are carefully selected, and trained, and are willing to help students have a successful campus living experience. One of the first people students meet on check-in day is the Resident Assistant, better known as the RA. Resident Assistants are assigned to each residence hall floor to help with the adjustment to community life and are instru-

mental in planning activities to help students become acquainted with their living environment. In addition, RAs are available throughout the year to assist with academic, personal, and community living concerns. Resident Assistants are specially trained upperclass students who are able to answer many questions about Juniata and the residence hall. Resident Assistants report to live-in Residence Directors, known as RDs. Residence Directors are professional staff members who manage each residence hall. They supervise the hall staff, coordinate programs and activities, advise the hall's Community Board, and work with the Student Conduct System. Residence Directors can answer many questions about student services procedures and the campus in general.

Residence Hall Programs

The residence halls, as well as other areas on campus, offer a wide variety of activities in which students can participate. These programs are developed by students through RAs, RDs, and the RHA. Everyone is urged to make their interests known, to become actively involved in planning these events, and to participate in as many programs as possible. The staff will assess the needs of the students on the floor and offer programs that enhance the community. These programs generally have a social and/or educational focus.

Living Options

Juniata's residence halls are smoke-free living environments.

International Floor: For U.S. students interested in rooming with freshmen international students or first year intensive English students (Intensive English Program).

Wellness Floor: Available for students who desire to live in an environment in which alcohol, tobacco, and other mood-altering drugs are not present.

Co-ed Floor: Available for upperclass students who choose to live in a community in which men and women live on the same floor.

CAMPUS SERVICES

Juniata College Health and Wellness Center

Wellness is important at Juniata. Students are encouraged to optimize their physical and emotional health. Although prevention is the primary focus of the Health & Wellness Center, intervention is also provided through the following services:

Medical Services The center is regularly staffed by a nurse, visiting physician and physician's assistants to provide treatment for minor injuries and ailments and routine care of chronic illnesses for full-time students. A health fee is assessed each semester for medical and counseling services. The fee is for services and is not a supplemental form of health insurance. For comprehensive and specialized care, students are referred to the local hospital or to other medical facilities in the area. All full-time Juniata students are required to provide proof of insurance. If proof is not provided, full-time students will be charged a premium and enrolled in a student accident insurance program.

Counseling Services The Health & Wellness Center also provides personal counseling for all students. Each student may receive up to ten sessions of counseling per year free of charge. These services are provided by master's level therapists who are supervised

by the center's consulting psychiatrist. All services are confidential and are not included on the student record. Counseling services also include assessments, screenings, prevention programming, appropriate referrals, workshops/presentations, support groups, drug and alcohol education programs, and when appropriate, referral to the center's consulting psychiatrist.

Career Services

The Career Services Staff is dedicated to providing students with the fundamental skills and experiential opportunities needed to prepare them for the challenges each will face in the ever-changing global work force.

In order to fulfill this purpose, Career Services provides Juniata students with individual counseling, computerized guidance and information programs (SIGI PLUS), internet assistance, and workshops on career development topics. The office supports a comprehensive library of up-to-date career resource materials and graduate/professional school information and maintains credential files for teacher candidates and on-campus interviewing. Additionally, Juniata students are invited to participate with other Pennsylvania colleges in numerous area-wide job fairs throughout the year. The largest of these include the Western Pennsylvania Career Services Association (Pittsburgh area) job fair, the Central PA Employment Consortium (Harrisburg area) job fair, and the Pittsburgh Educational Recruiting Consortium.

The Career Services Office also directs Student Internship Programs. Juniata encourages students to seek internship placements generally after completion of the sophomore year. Students receive assistance in the application process from Career Services and from Juniata faculty. Information regarding credit and non-credit internships is available in the Career Services Office in Ellis Hall.

Dining Services

Baker Refectory, located on the first floor of Ellis College Center, is the dining hall for students on the College meal plan. All residential students are required to select one of the appropriate meal plan options. The dining room is open for breakfast, lunch, and dinner seven days a week in accordance with the College calendar. Students may select from assorted entrees, including vegetarian selections at each meal, and a grill/pizza line with no limit on the number of portions. Monies from a spending account associated with several of the meal plan options can be used by the students to pay for any guests they bring to the dining hall.

The Muddy Run Café is located on the third floor of Ellis College Center and features a variety of menu items. Muddy Run is open to the general public as well as students. Monies from meal plan spending accounts can also be used for purchases in Muddy Run and the Cyber Café.

A catering staff is available for special functions. Catering arrangements can be made through the dining service office.

Mail and Banking Services

The College postal service is located on the ground floor of Ellis College Center. Students receive one assigned post office box for their entire stay at Juniata. A deposit is required in order to receive a mailbox key. Students should use their post office box number as part of their Juniata address. Stamps and money orders are available at the post office and parcels can be mailed there during open hours.

An automatic teller machine is available in Ellis Hall. Checks for $100 or less may

also be cashed at the Accounting Office in Oneida Hall. A 75 cent per check cashing fee is assessed and student I.D. is required.

Safety and Security Department

The staff of four full-time officers, three part-time officers, and 13 student security assistants is supervised by a Director of Campus Safety and Security who reports to the Dean of Students.

The Safety and Security Department is a service-oriented operation at Juniata. Security officers have a variety of training and professional experiences ranging from criminal investigation procedures to self-defense techniques. Each officer must go through periodic training as part of their employment requirements. Security personnel are on the job 24 hours a day, seven days a week. The department has at its disposal a campus security vehicle and full radio communication equipment. The Safety and Security Department has an excellent working relationship with the local and state police.

The Safety and Security Department annually distributes a brochure detailing policies and procedures which includes a crime report and a summary of incidents referred to the campus judicial system. The security brochure is available to all prospective students and employees upon request.

Identification Cards

The College I.D. card must be presented for admission to meals and to many of the activities at the College, including home athletic events and various College-sponsored programs. It also is used for checking out materials at Beeghly Library.

Used primarily for identification, the card should be carried at all times. Identification cards are nontransferable. If lost or stolen, the I.D. card can be replaced by request in the Campus Safety and Security Office. A fee of $5 is charged for replacement of the damaged card (must surrender old I.D.). A $10 fee is charged for replacement of a lost card.

Vehicle Registration

All students who bring motor vehicles to the College campus must register their cars, motorcycles, motor scooters, or bikes with campus Safety and Security. Upon approval of the vehicle registration form, a display sticker is issued and should be placed on the left side of the rear bumper. Failure to register a vehicle by a student results in a $10 fine.

Fees for Vehicle Registration

Currently, the vehicle registration fee is $10 for residential students and $5 for non-residential students.

Parking

A valid vehicle registration permit properly displayed (left side on rear bumper) entitles a student to park in student parking areas only; parking in unauthorized areas subjects students to a $10 fine.

Traffic Regulations

In addition to the rules and regulations for operating a motor vehicle in the Commonwealth of Pennsylvania, there are several regulations specific to the Juniata campus:

1. All vehicles must be operated at a reasonable speed on campus streets with particular consideration for pedestrian traffic.

2. Improper operation of any motor vehicle may result in the revoking of motor vehicle privileges on campus.
3. All vehicles must comply with all traffic devices, stop signs, etc.
4. No vehicles (including 2-wheel motorized vehicles) may be operated on, traveled over, or parked on any grass area, macadam or concrete walkway. Failure to comply with this regulation will result in a $25 fine.
5. Vehicles may not block any fire lane, alley, or roadway.

The Director of Safety and Security reserves the right to revoke student parking and/or motor vehicle privileges.

A brochure containing additional information may be obtained from the Office of Safety & Security.

Firearms

Possession of firearms on College property is prohibited. Firearms and archery equipment may not be stored in student rooms. The Campus Safety and Security Department maintains a registration process and central storage for students wishing to bring such equipment to campus for the purpose of taking advantage of local hunting resources.

Standards of Student Conduct

Juniata is committed to the academic and personal development of its students. As a community, we subscribe to fundamental policies and procedures which are designed to support an educational environment. The basic principle of community at Juniata holds that any behavior that infringes upon the rights, safety, privileges or property of any individual, or impedes the educational process, is unacceptable. To that end Juniata students are expected to exhibit a high degree of personal integrity and honesty. Dishonesty in any phase of College work, disregard for the safety of others, and theft of property or service are considered serious offenses in a community dedicated to the development of responsible individuals.

Alcohol

The College maintains that the use of alcohol and other drugs is not necessary for the success of social occasions.

Although students are considered adults for most phases of community life, Pennsylvania State Law prohibits the purchase, possession, or consumption of alcoholic beverages by persons under 21 years of age. Persons who furnish alcoholic beverages to those under 21 are subject to civil liability and criminal prosecution. Local ordinances and state laws also prohibit open containers of alcoholic beverages in public areas and in vehicles. College policy permits only students 21 years of age and older to possess or consume alcoholic beverages on campus.

Drugs

Juniata considers the possession and/or use of illegal or dangerous drugs a serious violation of College policy. Disciplinary action for involvement could lead to separation from the College. The College will assist the efforts of law enforcement officials who are investigating the involvement of persons with illegal or dangerous drugs.

Since the use of drugs, including alcohol, may be associated with medical and psychological problems, students may be referred, or refer themselves, to the counseling and medical resources of the College and/or the local community.

Sexual Harassment

It is Juniata policy to promote and maintain a campus environment free of all forms of discrimination, intimidation, and exploitation, including sexual harassment. The use of one's institutional position or authority to seek or solicit unwanted sexual relations with a member of the Juniata community is incompatible with the mutual trust and respect among members of the College community fundamental to the mission of Juniata. If a student has a supervisor, teacher or coach who has used his or her position to seek or solicit unwanted sexual relations, that student should report the matter to the Director of Human Resources (employment-related problem), the Provost (professor-student incidents), or the Dean of Students (student-student incidents). A copy of the sexual harassment policy is distributed to all students under separate cover. Additional copies are available from residence hall staff, the Student Services Office, and the Human Resources Office.

Reasonable Accommodations

Upon request, Juniata will make reasonable changes in living or academic situations for students with disabilities and/or for victims of campus violence.

Students with Special Needs

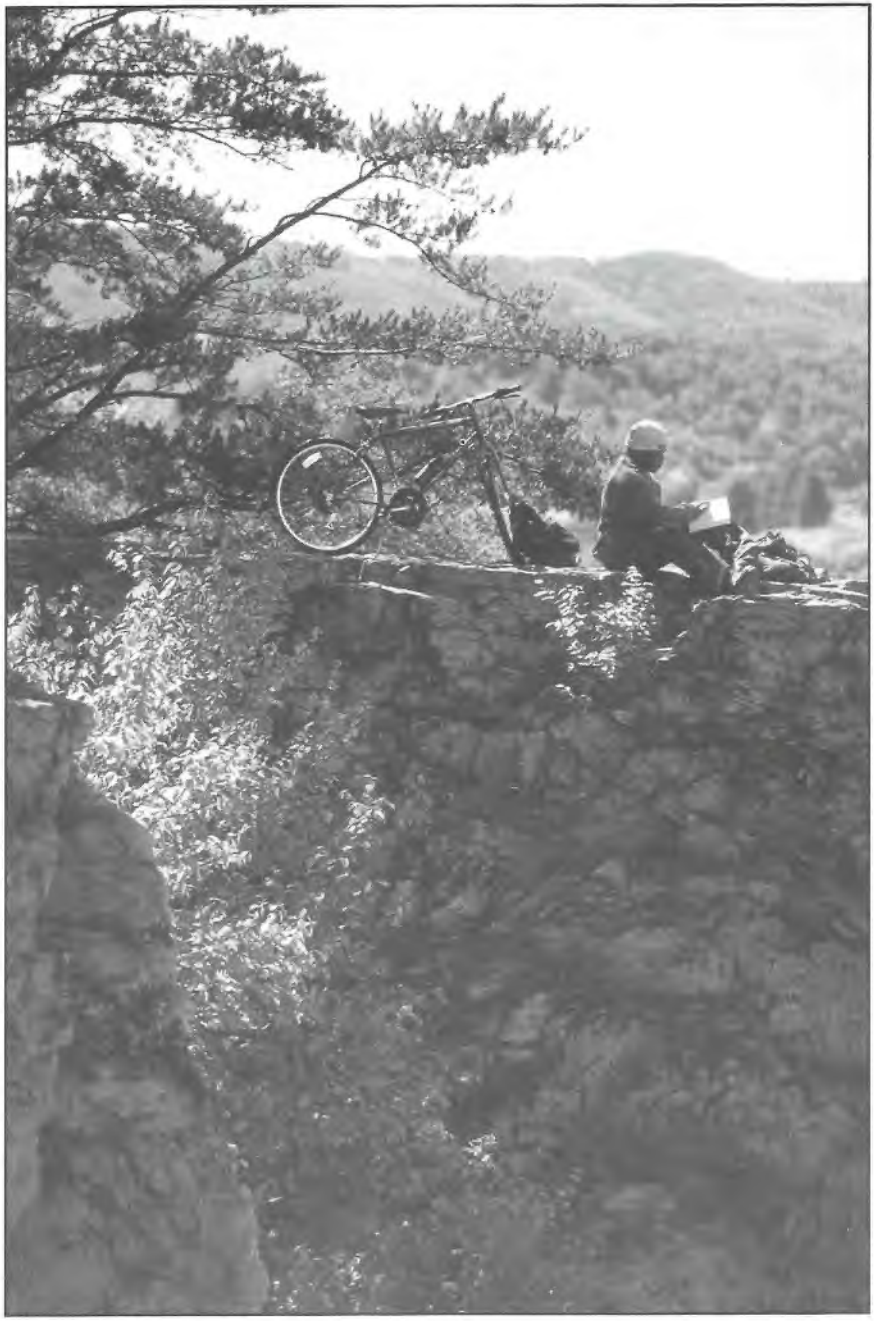
The Student Services Staff shall be responsible for carrying out the policy regarding services to students with special needs. All prospective students requesting information concerning support for any type of disability will be provided with the Statement on Students with Special Needs and offered the opportunity to meet with the Dean of Students as part of the pre-admission process.

Students with special needs who are admitted to the College shall be asked to provide documentation in support of the specific need(s). The documentation shall remain confidential and be kept on file in the Dean of Students Office. At no time will anyone, other than authorized staff and the student, have access to the documentation. However, the individual student may elect to share the information with whomever he/she chooses at any time.

The Dean of Students will act in the role of advocate for a student with a special need upon admission to Juniata College. Section 504, Subpart E, of the Vocational Rehabilitation Act of 1973 (PL 93-112) will serve as the basis for that advocacy. More specifically, a student with a documented disability will be afforded reasonable accommodations as outlined in his/her evaluation/assessment document which must be provided to the College by the student upon his/her request for academic accommodations.

Currently enrolled students who elect to be evaluated to determine whether or not a disability is impacting their learning will assume financial responsibility for the expenses incurred. The Dean of Students will assist the student in the process of finding the appropriate resources for the evaluation/assessment.

ADMISSION



ADMISSION

Philosophy	**64**
Guidelines for Entering Freshmen	**64**
Application and Information	64
Contents of Application	65
High School Transcript	65
Standardized Test Results	65
Application Form and Fee	65
Campus Visit	65
Financial Aid	66
Guidelines for Transfer Students	**66**
Contents of Transfer Application	66
Application Form and Fee	66
High School Academic Record	66
College Record	66
Statement of Interest	66
Financial Aid	66
Transfer Credit	67
Transfer without a Degree	67
Transfer with an A.A. or an A.S. Degree	67
Other Admission Programs	**67**
Conditional Admission	67
Deferred Admission	68
Spring Semester Admission	68
Early Admission	68
Home-Schooled Students	68
International Students	69
International Baccalaureate	69
Non-Degree Students	69
Non-Traditional Student Admission Programs	**69**
Program for Area Residents	70
Education Certification Program	70
Second Baccalaureate Degree Program	70
Senior Citizens Program	70
Huntingdon County High School Students Program	70

Admission

Philosophy

The Enrollment Center encourages students to apply to Juniata if they demonstrate the proper desire, motivation, and maturity needed to benefit from a four-year private college experience. Such qualities are evaluated through the application requirements listed below. The Admissions Committee places the most emphasis on a student's high school transcript. The second most important item would be standardized testing results followed by activities, community involvement and all the things that make up the student's life. Juniata seeks a broad student population base including a wide geographic and cultural representation from a variety of social and economic backgrounds.

The College reserves the right to determine which applicants will be admitted. The selection of candidates is made without regard to race, sex, religion, creed, national origin, handicap, or ability to afford a private college education.

GUIDELINES FOR ENTERING FRESHMEN

Application and Information

Students may apply to Juniata any time after completion of their junior year in secondary school. A complete secondary school transcript indicating courses and grades (including senior year courses and grades, if known) must be sent from the applicant's guidance office along with SAT I or ACT scores, an essay and a letter of recommendation. A nonrefundable $30 fee must also accompany the application. An on-campus interview is highly recommended, but is not required in all cases.

Candidates for freshman admission can choose from two application deadlines. Juniata offers ***Early Decision*** **and** ***Rolling Admission***. *Early Decision* is designed for students who believe that Juniata College is their first choice. Early Decision gives a student the opportunity to receive their admission decision, financial aid award and priority housing early in their senior year. *Rolling Admission* gives a student their admission decision within three to four weeks after the completion of their application file.

The Early Decision application deadline is November 15th of the student's senior year with notification no later than December 31st. The student is asked to complete Juniata's institutional aid form in order to receive an early financial aid award. Students accepted under Early Decision must submit a non-refundable $200.00 matriculation deposit 30 days after their early financial aid award and other information are received.

The Rolling Admission applications are accepted following completion of a student's junior year. The deadline is March 15th of the student's senior year. Students can expect an admission decision within three to four weeks after the receipt of all necessary information. Financial award packages will be determined after the FAFSA has been completed. In addition, students may choose to fill out the College Scholarship Service's PROFILE form; however, it is not required.

Note: Students who wish to be considered for half- and full-tuition scholarships

should have their application postmarked no later than January 15th of their senior year.

Contents of Application

An application for admission consists of the components listed below. Credentials that are reviewed include: high school academic record, SAT or ACT test results, completed application form including evidence of extracurricular involvement, recommendation letter(s), and a personal essay. Also, a personal interview is strongly recommended.

High School Transcript

A secondary school program including 16 college preparatory courses from an approved public, private, or parochial school must be completed or anticipated. These courses must include a minimum of four years of academic English, two years of a foreign language, and a combination of mathematics, laboratory science courses, social sciences; and humanities.

A complete secondary school transcript must be sent from the applicant's guidance office, noting all courses taken and grades received from the freshman year through the junior year. A listing of courses to be taken in the senior year should accompany this transcript and grades from the first marking period and/or the first semester should be sent when they become available. Upon graduation, students must submit a final secondary school transcript noting graduation date and guidance counselor signature or raised seal.

Standardized Test Results

Results of the Scholastic Assessment Tests (SAT-I: Reasoning Tests) taken in the junior and/or senior year are required. The American College Test (ACT), taken in either the junior or senior year, may be substituted for the SAT-I. Applicants whose native language is not English also must provide results of a Test of English as a Foreign Language (TOEFL) or scores from an ELS Center. International applicants who have studied wholly in a domestic, English speaking high school are required to submit an SAT/ACT score. All other international students are not required to submit SAT or ACT scores but should still submit TOEFL results or scores from an ELS Center. SAT-II: Subject Tests (Achievement Tests) are not required but may be submitted for admission consideration.

Application Form and Fee

Application forms may be obtained from the Enrollment Center, Juniata College, Huntingdon, PA 16652-2119. The application requires a listing of extracurricular activities in both school and community, guidance counselor or teacher letter(s) of recommendation, and an essay which answers one of the essay questions listed in the application for admission. The applicant should complete the form and return it to the Enrollment Center. A check or money order in the amount of $30.00 (made payable to Juniata College) must accompany the application. This non-refundable fee covers part of the cost of processing the application.

Campus Visits

Although not generally required for admission, the College strongly recommends that each prospective student make a visit to campus. Students can request a tour, attend class, talk with faculty members and students, and interview with an enrollment counselor. A visit to campus serves as an opportunity to learn more about the College, its stu-

dents and faculty. This is also the best way for the College to learn more about prospective students.

Appointments to visit the campus should be made two weeks in advance for any weekday, September through May, from 9 a.m. to 4 p.m.; for selected Saturdays, September through May, from 9 a.m. to 2 p.m.; or for any weekday, June through August, from 9 a.m. to 3 p.m. Please contact the Enrollment Center at 1-877-JUNIATA for more information or to schedule a campus visit.

Financial Aid

The financial aid application procedure is listed in the Student Finances section of this catalog.

GUIDELINES FOR TRANSFER STUDENTS

Applicants are considered transfer students if they have completed the equivalent of one full-time semester of coursework at a regionally accredited community college, junior college, or four-year institution. Notification of a transfer admission decision is given within one month upon receipt of all credentials. Application deadlines for transfer students are June 1 for fall semester entry and December 1 for spring semester entry.

Contents of Transfer Application

An application for transfer admission consists of the following components. Although a personal interview is not always required, it is strongly recommended.

Application Form and Fee

Application forms may be obtained from the Enrollment Center, Juniata College, Huntingdon, PA 16652-2196. The application requires an essay which answers one of the essay questions listed in the application for admission. The applicant should complete the form and return it to the Office of Admission. A $30 check or money order must accompany the application. This non-refundable fee covers part of the cost of processing the application.

High School Academic Records

In addition, the Office of Admission requires an official high school transcript which indicates the student's graduation date. SAT/ACT scores, while not required for students who have completed a full term of academic courses at another college, may be required in selected cases.

College Records

Transfer applicants must also submit an official transcript from each college previously attended and a college catalog or course descriptions of classes taken at previous institutions. The transcript must be sent directly to Juniata from the former institution(s). Catalogs and course descriptions are used to evaluate transfer credit.

Statement of Interest

Finally, transfer applicants must submit a written statement of interest indicating the reason(s) for transfer and potential benefits from enrolling at Juniata.

Financial Aid

All transfer students offered admission are eligible to apply for financial aid. The application procedure is the same as that for new students and is found under the section

"Student Finances." Additionally, financial aid transcripts from each previous college attended must be forwarded to Juniata's Office of Student Financial Planning, regardless of whether financial aid was received. For further information, contact: Transfer Coordinator, Enrollment Center, Juniata College, Huntingdon, PA 16652-2196.

Transfer Credit

Juniata does not accept in transfer any coursework below a grade of "C-" nor coursework of a strictly technical or remedial nature, nor physical education coursework, nor coursework from a non-regionally accredited institution. Special circumstances may affect the transferability of an individual's student record. These cases will be handled on an individual basis and decisions will be based on Juniata's academic policy. An official credit evaluation will be completed by the Office of the Registrar after a student has been admitted to Juniata.

Transfer without a Degree

Students transferring without an Associate Degree will have their work evaluated on a course-by-course basis. Courses equivalent to Juniata's curriculum course description will be granted direct course equivalence. Coursework accepted in transfer may be used to meet both liberal arts graduation requirements and Program of Emphasis requirements.

Transfer with an A.A. or an A.S. Degree

Juniata currently has a formal transfer agreement with Harrisburg Area Community College (PA), Community College of Allegheny County (Pittsburgh, PA), Cambria County Area Community College (Johnstown, PA), and Keystone College (La Plume, PA).

Students who possess an "AA" or appropriate "AS" degree from an accredited institution and wish to transfer to Juniata will be granted junior standing. Students would be awarded a minimum of 56 semester hours, a maximum of 60 semester hours, regardless of course equivalence. Courses will be granted direct course equivalence. All Juniata graduation requirements must be met. Coursework accepted in transfer may be used to meet both liberal arts and Program of Emphasis requirements; however, it may take the student more than the remaining 60-64 semester hours to complete all graduation requirements.

OTHER ADMISSION PROGRAMS

Conditional Admission

Students who are conditionally accepted to Juniata are admitted with the belief that they have the potential to succeed in college, but would benefit from extra mentoring and assistance from faculty and staff.

During the fall semester, all freshmen enroll in the required five-credit foundation course–College Writing Seminar–designed to provide first-year students with the reading, writing, computer, library, time management, and study skills necessary for success in college. For a conditionally admitted student, a specially designated Freshmen Adviser is the student's CWS instructor or a professor who has that student in a POE class during the first semester. Freshmen Advisers work closely with students to monitor their academic performance and address individual needs.

The program for conditionally admitted students includes regularly scheduled, required appointments (at least five such meetings) throughout the semester with the

Director of Academic Support Services and the Assistant Dean of Students to monitor and assess progress in each class, discuss issues related to transition to college living and a college-level workload, discuss how to prepare for and take tests, give pre-registration advice, assist with selection of a second adviser, and many other topics appropriate to the individual circumstances of each student.

Conditionally admitted freshmen also benefit from resources offered through or coordinated by the Academic Support Services Office, including use of the Writing Center, how to best utilize the faculty and faculty advisers, when referral to the counseling center is appropriate, how to build an academic schedule and design a Program of Emphasis, how to go about exploring possible careers, etc. There is a broad network of support and advisers available to all students.

While receiving the additional support described herein, conditionally admitted students carry a typical course load of 12-16 credits during the first semester and are in no way distinguishable from their peers in the classroom. **Upon completion of one semester in good academic standing, the student is no longer considered conditionally admitted.**

Deferred Admission

Deferred Admission is designed for students who wish to begin their college studies at a time other than the fall semester after graduation from secondary school. Application procedures and requirements are the same as for all other applicants. Candidates should note their interest to be considered under the Deferred Admission Program on their application form. Students may defer admission for up to one year.

Spring Semester Admission

Application procedures and requirements are the same as fall admission. The Spring semester application deadline is December 1. Interested persons may contact the Enrollment Center for further information.

Early Admission

Juniata encourages applications from students who demonstrates the aptitude, desire and maturity to begin college level work prior to the completion of his/her secondary school program. Students may consider enrolling at Juniata the last year or the last semester of their senior year. A formal application for admission must be completed. In addition students must: 1) Have an admission interview on campus; 2) Provide a written recommendation from their guidance counselor supporting their application for early admission and indicating they will receive a diploma either at the end of their junior year or after they have successfully completed one year of college level work, which includes college level English; and 3) Provide a written statement from their parents indicating approval of early admission. Applicants are expected to meet all other admission requirements.

Home-Schooled Students

Juniata welcomes applications from students who are home-schooled and have been approved by their local school district. Students must submit an application for admission and include standardized test results, an application essay, and one recommendation. Students are encouraged to submit additional information to support their application. Please contact the Juniata Home School Coordinator in the Enrollment Center for further information.

International Students

International students are strongly encouraged to submit applications. Application procedures are the same as for other freshman or transfer applicants, except for standardized test requirements. SAT/ACT test results are required only for international students who have spent their secondary education in an English-speaking school. In addition, for applicants whose native language is not English, a TOEFL score of 550 (213 on the computer based TOEFL) or better (or successful completion of Level 109 at an ESL Language Center) is required for unconditional admission to Juniata. Applicants with TOEFL scores of 500-550 (173-212 computer based score) may, if otherwise qualified academically, be granted a Language-Based Provisional Acceptance, provided they attend Juniata's Intensive English Program (IEP). At the end of the program, student English proficiency is evaluated by staff and, according to proficiency level attained, students may enroll in academic courses on either a part-time or full-time basis. Continued IEP support is offered, as needed, to all international students throughout their degree program enrollment.

A complete set of original or notarized educational credentials with certified English translations is also necessary for international applicants and is required before eligibility for admission can be determined. In addition, an affidavit of financial responsibility is required (by U.S. law) before an I-20 form (necessary for procuring a student visa from a U.S. Embassy or Consulate) can be issued.

Further information regarding international applications is available from:

Director of International Admission
Enrollment Center
Juniata College
Huntingdon, PA 16652-2119 USA
FAX: (814) 641-3100
E-mail: usastudy@juniata.edu

International Baccalaureate

International Baccalaureate-Diploma recipients are granted credit for one full year (30 credits) toward a degree at Juniata. Students who have an IB Diploma normally enter the College with sophomore standing. IB certificate recipients receive course credit for each higher level examination passed with a score of 5 or higher. To receive this credit the student will meet with the appropriate department chair or designee to consider the advantage or disadvantage of accepting credit. IB credit may be counted toward degree requirements.

Non-Degree Students

Any person who wants to take coursework at Juniata as a non-degree student need not apply for admission consideration, but must provide proof of academic ability. The Registrar enrolls and registers all non-degree candidates.

NON-TRADITIONAL STUDENT ADMISSION PROGRAMS

Juniata provides flexible programming opportunities for non-traditional students.

The following programs are available to students at reduced tuition. Other fees apply at the normal rate.

Program for Area Residents (PAR) - This program is available to any U.S. citizen and admissible resident of Bedford, Blair, Centre, Fulton, Franklin, Huntingdon, Juniata, or Mifflin Counties who has been out of high school for five years or more, will be a commuting student, and has not been enrolled as a degree-seeking student at Juniata within the past two years. Courses are offered for both degree and non-degree seeking students. Students may take courses on a full-time or part-time basis. Consult the Enrollment Center for further details.

Education Certification Program - Students with a B.A. or B.S. from an accredited four-year American college or university and who meet Education Department criteria may take courses at Juniata to receive their education certification. Students may take courses on a full-time or part-time basis. Consult the Enrollment Center for further details.

Second Baccalaureate Degree Program - Students who have earned a bachelor's degree at an accredited, domestic American university or college and desire a second bachelor's degree reflecting in-depth study in a discipline other than that of their first degree may enroll at half tuition upon completion of application requirements. Courses from a previous degree will be evaluated on a course by course basis and may be used to fulfill graduation requirements. Students must meet all Juniata graduation requirements, fulfill the department requirements within the new discipline, and observe the College residency requirement. International students who desire a second degree and have attended an American college for the duration of their first degree will be evaluated individually for their candidacy. For further information, contact the Enrollment Center.

Senior Citizens Program - Citizens who are 60 years of age or older may take courses on a part-time basis.

Huntingdon County High School Students Program - Upon recommendation of their guidance counselor, students from Huntingdon County high schools may take one course per semester at Juniata.

STUDENT FINANCES

STUDENT FINANCES

Student Financial Planning 73

Sources of Aid 73
Scholarships and Grants 73
Merit- and Need-based Scholarships 73
Loans 74
Student Employment 74
Eligibility for Financial Aid 74
Cost of Education Budget 75
Applying for Financial Aid 76
- Requirements and Timing 76
- Applications 76
- Applications Which Determine Financial Need 76
- Loan Applications 77

Financial Aid Standards of Progress 77
- Qualitative Standard 77
- Quantitative Standard 77
- Time Frame 77
- Appeals 78

Expenses 78

General Fee 78
Application Fees 78
- Application 78
- Matriculation 79

Occasional Academic Fees 79
- Auditing 79
- Overload 79
- Special Course Charges 79
- Private Instruction in Music and Ceramics 79

Special Services Fees 79
- Student Activity Fee 79
- Credentials 79
- Health Services 79
- Medical Insurance Coverage 79
- Technology Fee 79
- Vehicle Registration 80

Part-Time Fees 80
- Course 80
- Program for Area Residents 80

Deposits 80
- Contingency 80
- Registration 80

Payment of Bills 80

- Monthly Payment Option 80

Late Fees 81
- Late Payment 81
- Late Endorsement of Co-payee Checks 81

Refund Policy 81
- Tuition and Room Charges 81
- Board Charges 81
- Registration Deposit 82
- Financial Aid 82
- Summer Session, Occasional Academic and Part-time fees 82

Student Financial Planning

Juniata College offers a wide array of student financial planning services, ranging from deferred payment plans to scholarship programs. The Office of Student Financial Planning offers substantial, diverse funding and planning opportunities for all families *regardless of means*.

Families often have unique circumstances which affect their ability to meet college expenses. While some families may have little interest in traditional financial assistance, others require support from the diverse resources available from federal, state, and institutional programs. The College has developed several publications to help identify sources of financial support: the *College Catalog*, *Financial Aid Tool Kit* (available in the Admission Office and the Office of Student Financial Planning), and *Financial Aid Programs* (available in the Office of Student Financial Planning). In addition, Student Financial Planning staff members are available to discuss funding resources and opportunities.

Sources of Aid

Generally, the resources used to provide assistance to students fall into three broad categories: scholarships and grants, loans, and student employment.

Scholarships and Grants

Scholarships and grants are financial aid resources commonly termed "gift" assistance and need not be repaid (unless so stipulated as a condition of the award).

Grants

Grants are usually provided in an effort to help meet a student's financial need as established through the submission of the *Free Application for Federal Student Aid (FAFSA)*. Please review the section titled "APPLYING FOR FINANCIAL AID" for further information.

Scholarships

Scholarships are generally awarded in recognition of academic achievement or special talent. Financial need is usually not a selection requirement for most scholarships.

The Juniata Merit Scholarship Program:

The Juniata Merit Scholarship Program seeks to encourage the enrollment of exceptionally gifted students through a nomination process incorporating alumni, trustees, and trustee council members. Scholarships are offered in the following categories:

Scholarship Name	*Value*
Leadership Scholarships	Full-Tuition, Fees, Room, & Board
Peace Scholarships	Half-Tuition, Room & Board
Servant Leadership Scholarships	Half-Tuition, Room & Board
Entrepeneurial Scholarships	Half-Tuition, Room & Board
Arts Scholarships	Half-Tuition, Room & Board

Qualified students must apply for admission and have nomination forms submitted by January 15, 2001. In addition they must also participate in the Juniata Scholarship Competition. Please call (1-877-JUNIATA) The Office of Admission for further information.

Other Scholarship Programs

Juniata provides many other scholarship opportunities

Calvert Ellis Scholarship- At least $10,000 offered to students who have

achieved a minimum high school GPA of 3.25 and SAT score of 1270 (29 ACT).

Juniata College Presidential Scholarship - Qualifying students are granted $6,000-$7,000 if they have earned a minimum high school GPA of 3.00 and SAT score of 1100 (26 ACT).

Pennsylvania Sci-Tech Scholarship - Pennsylvania residents who are pursuing an education in an approved POE may qualify for a $3,000 collaborative award offered by the Commonwealth of Pennsylvania and Juniata. Contact the Office of Admission for further details.

European Union Scholarships - Students planning to combine interests in foreign language and study abroad (in either Germany or France) may be eligible for a full tuition award in their junior year. Call the Office of Student Financial Planning, Admission, or International Programs Office for further details.

Endowed and Annual Scholarships - The College is able to award many scholarships through the generosity of alumni, corporations, and friends. These resources may be awarded on the basis of superior academic performance, talent, diversity, specific criteria stipulated by a benefactor, and, in some cases, documented financial need. Selection may be made by the Office of Admission, scholarship committees, the Office of Student Financial Planning, the Provost, or the President. Call the Office of Student Financial Planning for more information.

"External" Scholarships - Many students receive scholarships that are controlled by agencies other than Juniata (Lion's Club, PTA, Rotary, etc.) Students are encouraged to explore these opportunities as resources to aid in their education.

Loans

Loans are resources which permit a student or parent to defer a portion of the cost of education over an extended period of time or until after the student leaves college. The college, federal government, and private corporations all offer programs which seek to provide educational financing at reasonable rates. To receive further information about various loan programs, a student or parent should consult publications in the Office of Student Financial Planning.

Student Employment

Juniata provides both on and off campus student employment opportunities to help defray educationally related expenses. Any student who wishes to work may apply for on-campus positions (off-campus positions affiliated with the College's federally subsidized Community Service Program require Federal Work Study eligibility). While the College cannot guarantee that all interested students will secure employment, there has been a fairly even balance between students who have indicated an interest in work and the availability of positions. Further information about the work programs can be found in *The Student Guide* and *Financial Aid Programs*. In addition, the College employs a Job Location and Development Coordinator to develop off-campus positions. These jobs may be filled by both *Federal Work Study* recipients and students simply earning wages from their employer (dependent on specific positions).

Eligibility for Financial Aid

Students must meet the following conditions to be considered eligible for most aid programs.

Enrollment status — Usually, students must be enrolled in a degree or certification

program to be considered eligible for many of the College programs. (Exception: Students eligible for the half-tuition program).

Semester course load — Most institutional programs require that students enroll for twelve or more credits per semester. Students who enroll for at least six credits may receive federal and state resources. The Federal Pell Grant provides awards to some students who enroll for fewer than six credits.

Citizenship — For most aid programs students must be citizens, permanent residents, or meet other qualifications stipulated by the federal government. Exceptions include several institutional programs and student employment. Inquiring students should contact the Office of Student Financial Planning for other permitted categories.

Off Campus/Foreign Study — Generally, students who participate in College affiliated programs (including internships, student teaching, and study abroad) are fully eligible for most forms of assistance*. (The financial aid associated with tuition exchange and the Program for Area Residents does not apply to all study abroad programs.) Participating students will apply for aid as usual, but must inform the Office of Student Financial Planning of their intentions through the submission of the Institutional Data Form. In addition, there are special financial incentives offered to students who plan to study at the Fachhochschule Muenster (Germany). Contact the International Programs Office for more information concerning this program.

*Students who participate in affiliate off-campus programs are not usually able to utilize work eligibility.

Maximum Institutional Scholarships/Grants/Benefits — It is Juniata's policy to never provide institutional assistance or benefits which individually or in combination, exceed the value of tuition, except in several unique scholarship catagories.

Cost of Education Budget

In order to determine a student's eligibility for need-based assistance, the College establishes a budget which incorporates direct charges such as tuition fees, room, and board, and assumed expenses like books, transportation, and personal costs. The budget considers the amount of money a family would have to spend for a student's attendance over the period of an academic year.

One budget is used for students living in College residence halls or other College-owned facilities; another budget is used for commuting students.

1999-2000 COST OF EDUCATION BUDGETS

Resident Students and Students Living in Off-Campus College Housing

Tuition	$18,940
Room	2,770
Board	2,520
Health Center Fee	120 *
Books & Supplies	450
Technology Fee	200 *
Student Activity Fee	100
Transportation & Personal Expenses	670+
TOTAL	$25,770

*Those students commuting from home are not charged the Health Center Fee and Technology Fee is reduced to $40. Other Off-Campus students whose home residence is not in the Huntingdon area are charged the reduced $40 Technology Fee, but are required to pay the Health Center Fee.

+Students from states other than Pennsylvania or Maryland will have their travel budgets increased in recognition of the additional transportation costs borne by students whose residence is geographically distant from Juniata. Contact the Office of Student Financial Planning for more information.

Commuting Students

Tuition	$18,940
Living Expenses	1,650
Books & Supplies	450
Technology Fee	80
Student Activity Fee	100
Commuting Costs & Personal Expenses	1,020
TOTAL	$22,240

APPLYING FOR FINANCIAL AID

Requirements and Timing

New students (freshmen and transfers) must be admitted to the College before financial aid can be awarded. Transfer students may be required to submit a Financial Aid Transcript to the Office of Student Financial Planning from every post-secondary institution they have attended even if no aid was received or no credits are accepted in transfer. New students should file applications for assistance by March 1 to ensure they are considered for all available funding. Non-degree students pursuing teacher certification should contact the Office of Student Financial Planning for additional information.

Continuing need-based aid recipients must reapply each year by April 1. Students who fail to meet the deadline date cannot be guaranteed that their funding will remain at levels consistent with the previous years. The renewal FAFSA, signed copies of federal tax returns, W-2 wage statements, and the Institutional Data Form (IDF) are required of both students and parents (if student is dependent).

Applications

Students and their families may have to complete several applications to receive consideration for various financial aid programs. Forms generally fall into two categories: applications used to determine eligibility for need-based aid and loan applications.

Applications Which Determine Financial Need

Juniata uses four forms to determine eligibility for assistance: The Free Application for Federal Student Aid (FAFSA), the Renewal FAFSA, the **PROFILE** Form, and Institutional Data Form. Families should carefully review the following information to decide which application(s) should be filed.

New Freshman (Never Attended Post-Secondary Schools) - The **PROFILE** Form can be submitted in the fall of the student's senior year. Contact the Office of Student Financial Planning for specific information. It is not required. The FAFSA **must** be submitted after January 1. Both are available from high school guidance centers.

New Transfer Students or Freshmen with Other Post-Secondary Attendance - The FAFSA (or Renewal FAFSA if FAFSA submitted in previous year).

Returning Juniata Students - Renewal FAFSAs will be sent to the home address of most students in December or January. The Institutional Data Form will be delivered to the

student's campus mail box in early December or is available from the Office of Student Financial Planning in the Enrollment Center. However, some students will not receive renewal applications because of special circumstances. If a student does not receive a renewal application he/she must file a new FAFSA.

Loan Applications

Students are required to complete the Master Promissory Note (MPN) as the chief application for a Stafford Student Loan. Unlike past years, the MPN will be completed only once for the student's entire borrowing history. Therefore, any student who submits their initial MPN in May or June, 2000, will not be required to file another application in subsequent years (the student's acceptance of the loan on the Juniata College financial aid award letter will dictate the value of the loan.) Please call the Office of Student Financial Planning with any questions.

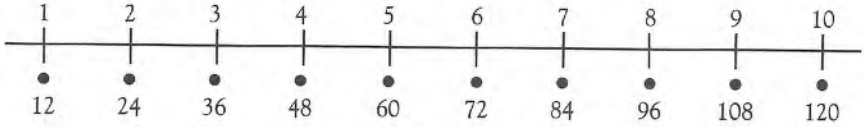
FINANCIAL AID STANDARDS OF PROGRESS

The Office of Student Financial Planning will evaluate financial assistance standards of progress at the conclusion of the spring semester.

Students must comply with three measures of satisfactory academic progress to maintain eligibility for financial aid. These measures are separate and distinct from regulations governing academic probation, suspension, and dismissal set forth by the Student Academic Development Committee. Please review these policies as noted in the section designated "Academic Standards of Progress."

1. Qualitative Standard — Students must achieve the minimal Grade Point Average as set forth by the College and listed in the section "Academic Standards of Progress." Students who fail to attain this standard are only eligible for financial assistance if reinstated by the Student Academic Development Committee.

2. Quantitative Standard — Students are expected to progress toward degree requirements at a reasonable pace. The first assessment of quantitative standards is an evaluation of the most recent academic year. Should a student earn an average of twelve credits (full-time attendance) for each term completed for the period he or she would be judged to have been making progress. For example a student attending both fall and spring term would need to earn 24 credits to be considered progressing. Students who have registered for half-time or more, but less than full, must earn six credits per term. If a student fails to meet that standard, his/her overall attendance will be evaluated. A semester-by-semester assessment follows:



Number of Semesters
Credits Which Must Be Earned

(NOTE: A student who earns an average of twelve credits per semester fulfills the financial assistance standard of progress at the minimum level, but would not complete degree requirements within the traditional four-year period.)

3. Time Frame — Students retain eligibility for federal financial assistance for five years or ten semesters. Institutional and state aid, however, is limited to four years or eight semesters.

Appeals

Students who fail to meet the progress standards noted above have several options. They may supplement credit earned by attending summer school; they may continue without aid; or they may petition for the reinstatement of aid. Appeals must be in writing and based on unusual, mitigating, or extraordinary circumstances which impeded their ability to maintain progress standards. (NOTE: Appeals granted by the Office of Student Financial Planning have no bearing on decisions made by the Student Academic Development Committee.)

EXPENSES

At a time when most higher education institutions' charges are outpacing the general inflation rate, a Juniata College education remains affordable for students of appropriate academic ability. Despite the continued rise in the costs of services required for education, Juniata has managed to hold inevitable fee increases to moderate levels, often below the increases of comparable institutions, increasing the real value of our educational product.

General Fee

Charges are based on a general fee covering most of the annual costs to a student:

	Resident Students	Non-resident Students
Fall Semester	$ 12,115	$ 9,470
Spring Semester	$ 12,115	$ 9,470
Total	$ 24,230	$18,940

The general fee is applied to regular instructional costs: use of Juniata's library and instructional facilities; academic services; personal student services; and maintenance and other operational costs. The general fee for full-time students also covers many extracurricular expenses including: admission to all home athletic events and numerous campus social activities; most of the admission charges to designated, College-sponsored cultural programs; use of all recreational/athletic facilities; and subscriptions to the student newspaper (The Juniatian). A student paying the general fee may take a normal load of 12 to 18 hours per semester. When permission is given to register for work in excess of the normal program, either in a given semester or for the academic year, the overload fee is $625 per semester hour.

The yearly general fee for resident students also covers board charges and room rental for regularly announced periods when the dining hall and residence halls are open (see the College calendar). A limited number of students, with approval from the Dean of Students, may live off campus each year, but others are expected to reside on campus unless they live with parents and guardians and commute from home in the immediate area. Resident students will have several meal plan options from which they may choose. All freshmen are required to take the standard 21 meal plan during the first semester. Questions about meal plan options should be addressed to Student Services.

Application Fees

Application: When applying for admission to Juniata, prospective students must forward an application fee of $30. This fee partially covers the cost of processing applications and is not refundable, nor is it applied toward payment of other charges.

Matriculation: When a student has been accepted for admission as a degree-seeking student, a $200 matriculation fee is to be paid by May 1. This nonrefundable fee reserves a space in the entering class. Once the student enrolls, $100 establishes the contingency deposit and $100 is credited toward the cost of orientation and credentialing services.

Occasional Academic Fees

Auditing: The fee for auditing is $410 per course, and is waived for students in good standing who are regularly enrolled in a full-time College program.

Overload: Students registering for more than 18 hours per semester are charged $625 per additional semester hour. Courses extending over more than one semester are prorated. If the student withdraws from a course(s) following the drop/add period, this charge must still be paid.

Special Course Charges: Some courses have laboratory, studio, or special field experiences as significant parts of the course. A special fee of normally $30 is assessed for these courses, with the exception of Biology and Chemistry. The fee for those courses is $50. The other departments with have courses which require a special course fee: art, education, geology, music, and physics. Some general education courses also require this fee. Students registering for off-campus student teaching must pay a $50 fee.

Private Instruction in Music: Regularly enrolled students who wish to take private music lessons for academic credit will be charged $430 for a two-credit, one hour per week lesson, or $215 for a one-credit, thirty-minute per week lesson. Students who do not desire academic credit, or persons not regularly enrolled at the College, may take lessons for $430 per semester (one lesson per week).

Private Instruction in Ceramics: Regularly enrolled students who wish to take ceramics lessons for academic credit may do so as part of their normal academic program. If lessons constitute an overload, the normal overload charge applies. Students who do not desire academic credit, or persons not regularly enrolled at the College, may take lessons for $525 per semester (one lesson per week).

Special Services Fees

Student Activity Fee: This fee provides funding to Student Government and the Juniata Activities Board. These organizations assist with support for student clubs, activities and organizations. This fee is assessed per semester. Full-time students will be charged $50 and part-time students $10.

Credentials: Fees for academic transcripts, co-curricular transcripts, and placement credentials will be covered by part of the student's matriculation fee. Up to 25 copies of each are free and a fee of $5.00 each will be charged for subsequent documents.

Health Services: All full-time resident and non-resident students who are not commuters will be charged a $60 per semester College Health Center Fee. This fee entitles the student to unlimited visits to the Health Center. Prescription medications dispensed will be billed to the student at cost.

Medical Insurance Coverage: An Accident and Sickness Insurance plan is available and will be billed automatically to all full-time students. The cost of this plan is $114 per year. Students may waive this charge by completing a form and providing proof of coverage. Further information on this plan may be obtained by contacting the Business Office.

Technology Fee: All resident students and full-time non-resident students will be charged a technology fee at the beginning of each semester. Resident students, excluding those living in Hess Apartments, will be charged $100 per semester; nonresident stu-

dents, including those living in Hess Apartments, will be billed $40 per semester. The fee includes local telephone service, private voice mail, access to cable television, and access to the College's academic computer network. A separate billing for long distance charges will occur monthly.

Vehicle Registration: All vehicles brought to campus must be registered with the Security Office. On-campus resident students will be charged $10 per year, and off-campus resident and non-resident students will be charged $5 per year.

Part-time Fees

Course: Non-resident students who do not participate in the College program and do not use facilities other than classrooms, libraries, or other academic facilities, are charged $800 per semester hour when taking less than 12 semester hours. For persons holding bachelor's degrees, the fee is reduced by one half.

Program for Area Residents: Residents of Huntingdon and contiguous counties who have been out of high school for more than five years may qualify for the College's reduced tuition program. For further information contact the Enrollment Center.

Deposits

Contingency: Once a student enrolls at Juniata, $100 of the previously-paid matriculation fee establishes the contingency deposit. Assessments and fines for damages to or loss of College property and other obligations are deducted from the deposit. When the balance of the deposit falls below $50, students are required to restore the deposit to its full $100 amount. After graduation or other separation from the College, the unexpended balance is refunded by check and mailed to the student's home address.

Registration: Each spring prior to pre-registration, upper-class students who plan to return for the fall semester must deposit $200 with Accounting Services indicating their intention of continuing at Juniata. This nonrefundable deposit allows them to preregister and reserve housing for the next semester. Once a student enrolls, the deposit is credited to the fall semester general fee.

PAYMENT OF BILLS

The general fee is due and payable prior to the beginning of each semester. Fall and spring semester bills are due on or about August 15 and January 2, respectively. Financial settlement is required by Accounting Services for all outstanding obligations. Students may be denied registration, room occupancy, and dining privileges without the necessary arrangements. Payment after the due date is subject to the late payment fee. Also, students cannot be granted honorable dismissal, end-of-term reports, transcripts of grades and credits, or diplomas until all College bills have been paid in full.

Monthly Payment Option: Students who wish to pay College bills on a monthly basis may use Tuition Management Systems. The interest-free, monthly payment option enables families to spread all or part of the annual expenses over equal, monthly payments. A small annual fee is charged. Low-interest monthly payment options, including an unsecured loan, a home equity credit line, and federally-backed loans, are also available. Students can contact Tuition Management Systems at 1-800-722-4867 or (401) 849-1550 for more information on these programs. Also, the Office of Student Financial Planning can inform students of alternative financing strategies.

Credit Balances

Juniata will pay credit balances to students in a timely manner, usually within two weeks of the determination of the credit balance. The end of the second week of classes each semester is the earliest possible date credit balances can be determined. Credits are deemed to be applied to bills in the order as indicated on page 76.

Late Fees

Late Payment: Any student who fails to pay his or her tuition, room, and board bill (or make proper arrangements with Accounting Services) by the due date on the bill is charged a fee of 1.25% per month on past due balances.

Late Endorsement of Co-payee Checks: The College often receives checks for tuition, room, and board made out to both the College and the student. All student loan checks are made out in this manner. The College may not use these funds until the check is endorsed by both the College and the student. The College will notify the student when such a check is received. Failure to endorse the check in a timely manner (generally within one week of notice date) will result in a charge of $5 for each subsequent week or part of a week.

Through an agreement with PHEAA or with individual banks and the College, direct deposit of loan proceeds into the College's bank account is permitted. Funds received in this manner are **not** subject to a late endorsement fee. Students should authorize this method of disbursement by checking the appropriate box on their loan application or signing an authorization form available in Accounting Services.

REFUND POLICY

As the College has expenses of a continuing nature, usually incurred on an annual basis, it assumes that students, once enrolled, will remain for the semester. However, the College recognizes that individual circumstances, including serious illness or other emergency reasons, may dictate a withdrawal. Official notice with an explanation of the reason for withdrawal must be made to the Dean of Students. A case-by-case review of the particular circumstances will be made to determine refund eligibility (if any). The College uses a federally mandated refund procedure based on a percentage of semester completed to calculate charges and applicable credits for students separating from the College after the semester begins.

Tuition and Room Charges: Tuition and room charges, for refund purposes, are prorated from the first day of classes each semester and based on the percent of the semester which has expired. Full tuition and room charges will be assessed after the 60% point of the semester has passed.

All students who separate from the College, after the start of classes, will be assessed an administrative fee of $100.

The contingency deposit will be retained for those students who have only temporarily separated. The deposit will be refunded if the student chooses not to return.

Board Charges: Board charges are prorated in accordance with length of College attendance.

Registration Deposit: The registration deposit is normally refundable after the deadline only under the following conditions:

1. When the student is not permitted by the College to re-enroll for the following semester;
2. When the student is incapable of re-enrolling for the following semester due to a verifiable medical reason;
3. When the student will not be re-enrolling for the following semester as a result of participation in a College-sponsored program approved by the Provost.

Students who have been granted a "Leave of Absence" after they have made a registration deposit for the following semester will have their deposit retained by the College until the semester in which the student has indicated their desire to return.

All other requests for refunds will be considered on a case-by-case basis by the Dean of Students, but are ordinarily denied.

Financial Aid: The crediting of financial aid ceases for withdrawing students in the semester in which separation occurs. Federal regulations require that refunds be made in the same order as credited. Credits are applied to bills in the following order:

Federal Family Educational Loan (FFEL) program
Federal Supplemental Loan for Students
Federal unsubsidized loans
Federal subsidized loans
Federal Plus Loans
Federal direct subsidized and unsubsidized loans
Federal Direct Plus Loans
Federal Perkins Loan Program
Federal Pell Grant program
Federal Supplemental Education Opportunity Grants Program
Other Title IV programs
Other federal sources of aid
State grants
Juniata grants and scholarships
Other payments

Summer Session, Occasional Academic and Part-time Fees: Refunds are calculated proportionately according to the above table.

COURSES OF INSTRUCTION

COURSES OF INSTRUCTION

Explanation of Course Descriptions 85

Accounting, Business, and Economics 86
- Accounting 87
- Management and Economics 88

Art 91
Biology 96
Chemistry 101
Cultural Analysis 105
Education 107
English, Communication and Theatre Arts 112
- English 113
- Communication 115
- Theatre Arts 117

Environmental Science and Studies 118
Geology 121
- General Earth and Environmental Science 122
- Professional Courses in Geology and Environmental Science 122

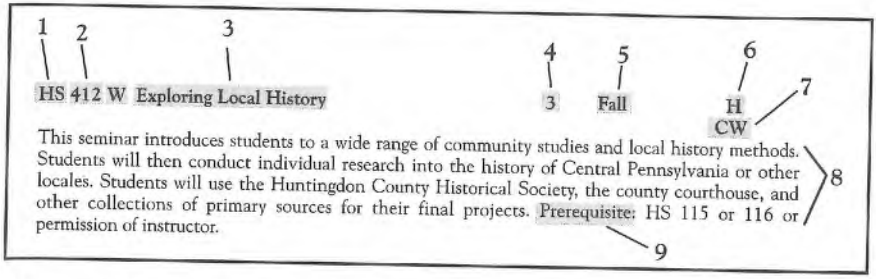
History 125
Information Technology 131
International Studies 133
Mathematics and Computer Science 134
- Computer Science 135
- Mathematics 137

Music 140
Applied Music 141
Non-Departmental 143
Peace and Conflict Studies 144
Philosophy 147
Physics 150
Politics 154
Psychology 158
Religion 161
Sociology, Anthropology, Social Work, and Criminal Justice 163
World Languages and Cultures 168
- English as a Second Language 169
- French 170
- German 172
- Russian 173
- Spanish 175

COURSES OF INSTRUCTION

Explanation of Course Descriptions

This section lists the courses regularly offered at Juniata. Course descriptions are prefaced by a brief introduction to the department or program.


1
2
3
4
5
6
7
HS 412 W Exploring Local History
3
Fall
H
CW
This seminar introduces students to a wide range of community studies and local history methods. Students will then conduct individual research into the history of Central Pennsylvania or other locales. Students will use the Huntingdon County Historical Society, the county courthouse, and other collections of primary sources for their final projects. Prerequisite: HS 115 or 116 or permission of instructor.
8
9

Key to Course Descriptions

1. Department or program abbreviation: HS = History
2. Course number: Generally courses numbered 100-199 are introductory, 200-299 intermediate, 300-499 advanced or specialized
3. Course title
4. Semester credit hours
5. Semester course is typically offered
6. Distribution requirement course meets: H = Humanities
7. Skills course meets: Q=Quantitative
8. Summary of course content
9. Prerequisite(s) or corequisite(s) required to enroll in course

Frequently Used Terms

Prerequisite: a course that must be completed before enrolling. For example, Survey of Western Art is a prerequisite for upper-level art history courses.

Corequisite: a course that must be taken at same time. Students enrolled in General Ecology, for example, are expected to enroll concurrently in General Ecology Lab.

Alternate Prerequisite: one of two or more courses a student can choose to serve as a prerequisite. For example, students who plan to take Minorities can use either Introduction to Sociology or Introduction to Anthropology as a prerequisite.

ACCOUNTING, BUSINESS, AND ECONOMICS (EB)

	Office
Assistant Professor Alexander (V.P. for Financial Affairs)	1923 Moore 202
Professor Donaldson	Good 416
Assistant Professor Duey	Good 100A
Assistant Professor Frandsen	Good 318
Professor Lakso (Provost)	FND 224
Assistant Professor Peruso	Good 419
Assistant Professor Pienkos	Good 415
Assistant Professor Rosenberger	Good 410
Professor Weaver (Chair)	Good 418

Background Information:

All business programs at Juniata College are crafted to give each student the tools to analyze, think, and perform. To achieve these goals, each student is provided with the opportunity to learn to use information to make decisions, work effectively with others, communicate effectively, and select experiences, like internships and study abroad options, to develop the ability to think and act broadly. The department makes available several opportunities for "real world" experiential learning.

Special programs, facilities, or equipment:

- Case-study based courses
- Computer programs, presentations, and writing fully integrated into course work
- Students Of Business (SOB) club
- Internships available
- International experiences available

Programs of Emphasis:

- Accounting
- Management
- Information Systems

Student Designed Programs of Emphasis:

- Accounting/Environmental Studies
- Finance
- Business/Secondary Education
- Accounting/Finance
- Management/Communications
- Education and Management
- English and Business
- Computer Science/Management Information Systems/Management
- International Business/History
- Media Studies/Business

Secondary Emphasis:

- Requirements: 18 credits or six courses in related business field, one of the courses 300 level or above

Internship/Research Experiences:

- Local minor league baseball organization
- Local hospital
- Marketing and promotions firms
- On campus and local internship placement

ACCOUNTING

EB 001 Non-Credit Business Internship 0 **Summer**
Provides students with an overview of an organization including its structure, strategies, and principal lines of activity as well as providing an opportunity for practical application of the skills developed in students' areas of concentration. Note: see the chapter Academic Programs under Internships: listed as Internship: (title); must be at least 9 weeks long. Prerequisites: sophomore standing and permission.

EB 131 Financial Accounting 3 **Fall & Spring** S
Introduces fundamental principles and assumptions of accounting as they relate to transaction analysis and basic financial statements.

EB 232 Intermediate Accounting I 4 **Fall** S
A comprehensive study of contemporary accounting theory, concepts, and procedures including their application to financial reporting. Emphasis is on asset classification on the balance sheet. Prerequisite: EB 131.

EB 233 Intermediate Accounting II 4 **Spring** S
A continuation of Intermediate Accounting I. Emphasis is on liability and stockholders' equity classifications on the balance sheet and other financial statements. Prerequisite: EB 232.

EB 236 Managerial Accounting 4 **Fall & Spring** S QM,CW
Emphasizes accounting concepts for the internal use of management in planning and control. Course focuses on spreadsheet applications to analyze management problems. Prerequisite: EB 131.

EB 334 Advanced Accounting 3 **Fall** S
Focuses on accounting theory and problems regarding such specialized topics as: partnerships, consolidated financial statements, governmental accounting, multinational enterprises, and corporate bankruptcy. Prerequisite: EB 233.

EB 335 Auditing 3 **Spring** S CW
Emphasizes current auditing principles and the objectives of independent accounting firms. Particular attention is placed on auditing procedures and the ethical and legal responsibilities of the auditor. Prerequisite: EB 233.

EB 336 Federal Taxation: Individuals 3 **Spring** S
Examines the federal income tax structure and its relationship to individuals and sole proprietorships. Emphasis is placed on the preparation of the individual income tax return. Prerequisite: EB 131.

EB 337 Cost Accounting 3 **Fall or Spring** S
An analysis of the use of cost accounting systems to accumulate and allocate manufacturing costs to support inventory valuation, decision-making, and managerial control. Prerequisite: EB 236.

EB 490 Fieldwork in Accounting 2-9 **Fall & Spring** S
Develops students' skills, through practical experiences or field projects which require proposals for problem analysis and solution. The experiences and projects are provided by local businesses or other organizations and use technical and decision skills developed in students' areas of concentration. Note: limited availability, may be repeated up to a total of 9 hours credit. Corequisite: EB 495. Prerequisite: Permission.

EB 495 Fieldwork Research: Seminar 2-6 **Fall & Spring** S
Requires students to reflect on the experience and/or pursue relevant research. Note: limited availability, may be repeated up to a total of 6 hours credit. Corequisite: EB 490. Prerequisite: Permission.

MANAGEMENT AND ECONOMICS

EB 001 Non-Credit Business Internship 0 **Summer**
Provides students with an overview of an organization including its structure, strategies, and principal lines of activity as well as providing an opportunity for practical application of the skills developed in students' areas of concentration. Note: see the chapter Academic Programs under Internships: listed as Internship: (title); must be at least 9 weeks long. Prerequisites: sophomore standing and permission.

EB 101 Introduction to Business 3 **Fall & Spring** S
A broad survey of business topics. Emphasis on developing a basic understanding of business vocabulary, concepts and practices, and basic analytical skills used in business. Interaction with practicing professionals through the Capstone Professional Networking assignment.

EB 105 International Economic Issues 3 **Fall & Spring** SI
Understanding international economics is increasingly important for private and public decision-makers. In a world of growing economic interdependence, the ability of central banks to provide a stable environment for business is a key issue. Accordingly, this course develops principles of macroeconomics, including analysis of the causes and consequences of exchange rate changes, international capital flows, payments deficits, and currency crises. Patterns of international trade and the rationales for various trade policies are also assessed. Each student is required to demonstrate a working command of relevant concepts and analysis in a country case study.

EB 201 The Management Process 3 **Fall** S
Studies some of the primary functions of managers in organizations: planning, organizing, and controlling. Introduces the basics of strategic management. Method of instruction combines lecture, in-class exercises, case analysis, and an experiential project. The experiential project asks students to actually perform as managers. Prerequisite: sophomore standing.

EB 202 Behavioral Analysis of Organizations 4 **Spring** S CW
The broad focus of the course is to examine how individuals come together to form a successful organization. The course is broken into three major sections: people, organizations, and leadership. The course emphasizes student involvement and engages students in a variety of in-class exercises, case analyzes, role playing exercises, small group exercises, and an off-campus class experience or two. One or more off-campus experiences are required for the course. Prerequisite: sophomore standing (a Peace and Conflict Studies course).

EB 203 Introduction to Business Law 3 **Alternate Years Fall** S
An introduction to the American legal system as it applies to the business community. Emphasis is on basic legal concepts in contracts, real and personal property, agency and employment, and transaction of business through partnerships and corporations. Prerequisite: sophomore standing.

EB 204 Legal Regulation of Business 3 **Alternate Years Spring** S
Examines the areas in which by statute the legislative branch of government regulates business. Topics include employment and anti-trust law, bankruptcy, consumer protection, securities laws, and the uniform commercial code. Prerequisite: sophomore standing.

EB 210 Quantitative Business Analysis I 3 **Fall** S QS
An introduction to descriptive and inferential statistics in business/economics applications. Inferential statistics is emphasized as it provides the backbone for much of today's business research. An understanding of probability theory is fundamental in learning about inferential statistics, and therefore, is an important part of the course. Prerequisite: high school algebra or pre-calculus.

EB 211 Quantitative Business Analysis II 3 **Spring** S QM
This course is a continuation of EB 210. Tools from EB 210 are advanced to cover topics like comparing parameters between populations, ANOVA, Regression Analysis, Forecasting, and Decision Analysis. The focus of the work is the application of the concepts to decision making. Excel is used for problem solving when the problems get cumbersome to solve by hand. Prerequisite: EB 210.

EB 222 Principles of Macroeconomics 3 **Fall & Spring** S
Macroeconomic conditions affect individuals and businesses in numerous ways: employment oppor-

tunities, the purchasing power of wages and salaries, the cost of borrowing money, sales, profits, and competitiveness against foreign businesses. This course develops the theories relevant to understanding the business cycle, inflation, unemployment, deflation, exchange rates and balance of payments problems. It also examines the options and trade-offs governments face as they seek to provide a stable macroeconomic environment through monetary and fiscal policies. Case studies of the macroeconomic performance and policies of diverse countries provide a comparative orientation. Prerequisite: EB 105.

EB 223 Principles of Microeconomics 3 **Fall & Spring** S
The optimizing behavior of households and firms serves as the focal point in this study of market-based resource allocation. Supply and demand analysis, spending and saving decisions of households, production and employment decisions of firms, alternative market structures, and environmental economics are among the topics covered. Prerequisite: sophomore standing.

EB 305 Economics of the Environment 3 **Spring** S
Provides useful tools for analyzing causes of environmental problems in market economies as well as for evaluating alternative solutions to those problems. Prerequisite: EB 223.

EB 341 Production and Operations Management 3 **Spring** S CW
Examines the process of creating goods and providing services, from the procurement of inputs through delivery to and feedback from the customer. The course is a blend of the qualitative and quantitative aspects of operations. The qualitative part of the course includes things like supply-chain management and designing goods and services. The quantitative part includes things like decision-making tools, forecasting, and transporation models. Prerequisite: EB 201

EB 342 Management Information Systems 3 **Spring** S
The study of how computer technology is used to gather, store, organize, retrieve, and transmit information within and between organizations. Topics include the organizational and technical foundations of information systems, the contemporary tools and techniques for building systems, and the management of information system resources. Emphasizes current computer platforms, applications, and techniques used in business. Prerequisites: EB 201 (EB 201 can be taken concurrently).

EB 351 Marketing Management 3 **Fall** S
Analyzes consumer behavior leading to selection of product as well as pricing, promotion, and distribution strategies. Research projects help students apply concepts to the complexities of decision making in marketing. Prerequisite: EB 201.

EB 355 Marketing Strategies 3 **Spring** S
Examines in depth the development and implementation of marketing strategies, for businesses and not-for-profits, for domestic and international businesses. Prerequisite: EB 351.

EB 361 Financial Management I 3 **Fall** S
The management of business assets and liabilities and the concurrent creation of sources and the uses of funds. Special attention is given to financial statement analysis, bankruptcy prediction, and decisions involving working capital management. Prerequisites: EB 131.

EB 362 Financial Management II 3 **Spring** S
A continuation of Financial Management I with special attention to capital budgeting, capital structure, security pricing models, and modern portfolio theory. Prerequisite: EB 361.

EB 371 Human Resource Management 3 **Fall or Spring** S
The early part of the course takes an in-depth look at the fundamental nature of the employer-employee relationship. This fundamental framework is then used to evaluate traditional aspects of Human Resource Management practice: Selection, Training, Recruitment, Performance Appraisal, and Compensation. Class time involves some lecture, in-class exercises, guest speakers from industry, and case analyses. There is also a course field trip. Prerequisite: EB 202.

EB 381 International Political Economy 3 **Spring** SI CW
The pursuit of wealth and power, profit and privilege, corporate growth and national security occurs in a global context. This course examines the business agendas and political priorities that find expression in the policy agreements and institutional arrangements of the contemporary global economy. The course is conducted as a seminar and requires a substantial research project. Prerequisite: 105.

EB 390 Arts Management/Museum Studies I (See AR 390)

EB 391 Arts Management/Museum Studies II (See AR 391)

EB 399 Special Topics 3 **Fall or Spring** S
Offers special studies to meet the interest and demands of students. Note: abbreviated ST:(title); students may take each ST: course for credit.

EB 407 Entrepreneurship 3 **Fall** S CW
Examines the application of administrative and functional fields to small business situations. Special attention is given to entrepreneurs, assessing opportunities, developing concepts, starting a new business and solving the problems typical of the small business. Projects and local businesses may be used as cases. Prerequisites: senior standing.

EB 463 Financial Markets and Institutions 3 **Spring** SI CW
The role of credit and capital and the function of dollar and euro bonds in today's internationalized financial markets are investigated empirically and assessed analytically in this course. Numerous economic theories relevant to understanding the behavior of various asset markets are developed, including portfolio and asset models of exchange rate determination and currency speculation. The costs and benefits of alternative government policies such as financial regulation and capital and foreign exchange controls are weighed. The subtleties of central banks and the complexities of their mandates are explored, with particular attention to the euro and the European Central Bank. The course is conducted as a seminar and requires a series of policy papers. Prerequisites: EB 222.

EB 480 Senior Seminar 3 **Spring** S
A capstone course for POE's in Management. Through the use of case studies and simulations, students in the course will look at corporate strategy formulation and implementation in terms of the competitive environment, the integration of functions within the firm, and the point of view of CEOs and other top executives. Ways in which firms may gain and sustain competitive advantage will be examined. Prerequisite: Senior standing in EB or permission of the instructor.

EB 490 Fieldwork in Business 2-9 **Fall & Spring** S
Develops students' skills, through practical experiences or field projects which require proposals for problem analysis and solution. The experiences and projects are provided by local businesses or other organizations and use technical and decision skills developed in students' areas of concentration. Note: limited availability, may be repeated up to a total of 9 hours credit. Corequisite: EB 495. Prerequisite: Permission.

EB 495 Fieldwork Research: Seminar 2-6 **Fall & Spring** S
Requires students to reflect on the experience and/or pursue relevant research. Note: limited availability, may be repeated up to a total of 6 hours credit. Corequisite: EB 490. Prerequisite: Permission.

FINE ARTS (AR)

	Office
Professor McBride	Carnegie Building
Professor Rosell (Chair)	Good 407
Associate Professor Troy	Ceramic Studio
Assistant Professor Earenfight (Director, Juniata College Museum of Art)	Carnegie Building
Assistant Professor Siegel (Curator, Juniata College Museum of Art)	Carnegie Building

Background Information:

An understanding of our cultural heritage and the way in which it affects our contemporary attitudes is very important to the study of the arts. The art history program at Juniata College contributes to that understanding through a wide variety of courses, topics, and independent studies. The department also provides experience in the studio arts: drawing, painting, photography, computer graphics and ceramics. Studio space to facilitate the study of these media is situated in Carnegie Hall and the Ceramics Studio.

Special programs, facilities, or equipment:

- Carnegie Hall: college museum housing numerous arts collections
- Darkroom
- Drawing and Painting Studio
- Pottery Studio
- Computer Art Lab

Programs of Emphasis:

- Art History
- Museum Studies – Art History Focus
- Studio Fine Arts

Student Designed Programs of Emphasis:

- Arts Administration
- Arts Management
- Art and Communication
- Art and Psychology
- Art History and Anthropology
- Ceramics
- Visual Arts

Secondary Emphasis:

- Requirements: Minimum of 18 credits of AR courses, selected with art advisers.

Internship/Research Experiences:

- National Gallery of Art
- Palmer Museum of Art
- Hirshhorn Museum and Sculpture Garden
- Gettysburgh Battle Site and Memorial
- Brandywine River Museum

AR 105 Drawing and Design 3 Spring F

This course presents basic concepts for working with all Fine Art media. It focuses on the elements of composition and the communication of ideas and feelings through the manipulation of various art materials. Students will use graphite, charcoal, ink, acrylic and collage to develop an understanding of the expressive qualities of line, shape, texture, space and light. Note: a special fee for art supplies and a field trip is assessed.

AR 110 Survey of Western Art 3 Fall & Spring FI

Introduces the major periods of western art history from its genesis to the present: Ancient, Egyptian, Greek, Roman, Early Christian, Byzantine, Early Medieval, Romanesque, Gothic, Proto-Renaissance, Renaissance, High Renaissance, Mannerism, Northern Renaissance, Baroque, Nineteenth Century, and Twentieth Century. Masterpieces from each epoch provide information about the cultures from which they derive, and highlight the individual achievements of outstanding artists.

AR 115 Survey of World Art: Gods, Spirits, and Ancestors 3 Fall & Spring FI

Surveys the principal artistic themes among the following regions and peoples: Asia (Chinese), Africa (Yoruba, Benin, Dogon), Oceana (Asmat, Maori), and North America (Tlingit, Navajo, Sioux). Works from each culture are studied from art historical, archaeological, and anthropological points of view.

AR 120 The Art of Environmentalism 3 Fall or Spring FS CW

This course traces the evolution of ideas, concerns, and themes about nature, the American landscape, conservation, and preservation in this country from 1600 to the present. Students learn to "read" painting, sculpture, and architecture as socio-political and historical documents in order to create a context in which to discuss changing ideologies about the environment.

AR 200 Painting 3 Fall F

An investigation of various painting media. Oils, watercolors, acrylics, and collage are used and emphasis is on the poetic qualities color gives to an image. Opportunities are provided to develop the concepts of visual structure: line, shape, space, volume, texture, tension, and color unity. Note: A special fee for art supplies and a field trip is assessed. Note: Students provide their own paint and brushes.

AR 204 Computer Art: Electronic Imaging 3 Fall & Spring F

This course uses the computer, the newest tool being used to create works of art, to develop ideas and generate images that wouldn't happen using any other medium. Images can be created by hand or scanned into the computer and viewed either as an image on a monitor or as a finished print. Design and composition will be emphasized. Note: A special fee for art supplies and a field trip is assessed.

AR 205 The Modes of Clay 3 Fall & Spring F

An introductory studio course in ceramics. Emphasis is placed on making a body of personal work through understanding the basic ways in which clay has served human needs throughout history. The course will parallel the historical and cultural development of ceramics from its primitive beginnings to its current status as a mode of artistic expression in a high-technology society. Note: Slides, film and readings will augment studio work aimed at making functional as well as conceptually-oriented objects. Note: A special fee for art supplies is assessed.

AR 208 Basic Photography 3 Fall F

Emphasizes understanding the expressive possibilities of photography, introducing students to ways of controlling basic photographic equipment and involving students in projects stressing the use of symbols in photographs. Note: Students provide their own cameras, film, and paper. Note: A special fee for art supplies and a field trip is assessed.

AR 300 Intermediate Painting Studio 3 Fall F

Offers additional experience in painting. The student will engage in a more sophisticated degree of problem solving in one of the painting media. Note: A special fee for art supplies and a field trip is assessed. Prerequisite: AR 200. Note: Students provide their own paint and brushes.

AR 303 Intermediate Drawing Studio 3 Spring F

Offers additional experience in drawing. The student will engage in a more sophisticated degree of problem solving in some of the various drawing media. Note: A special fee for art supplies and a field

trip is assessed. Prerequisite: AR 105. Students provide their own pencils, rulers, boards, brushes, and pens.

AR 304 Computer Art II 3 **Fall** **F**
Students will build upon AR 204 by using a graphics application that augments the application studied in AR 204. This will introduce the student to the use of vector based graphics and its conversion to a bitmapped form. The use of text and color controls will also be introduced. Note: a special fee for art supplies and a field trip is assessed. Prerequisite: AR 204.

AR 305 Intermediate Ceramics Studio 3 **Fall & Spring** **F**
Offers additional experience in ceramics. The student will engage in a more sophisticated degree of problem solving in the medium of clay. Note: A special fee for art supplies is assessed. Prerequisite: AR 205.

AR 308 Intermediate Photography 3 **Fall** **F**
Builds upon the experiences of Basic Photography. Additional projects are developed dealing with the expressive use of photography, transforming objects into symbols, and developing a spontaneous flexible approach to an expressive interpretation of the physical world. Note: A special fee for art supplies and a field trip is assessed. Prerequisite: AR 208. Note: Students provide their own camera, film, and paper.

AR 311 Ancient Art and Architecture 3 **Alternate Years** **FI**
Fall or Spring **CW**
Studies the art and architecture of the Ancient Mesopotamians, Egyptians, Greeks, and Romans. Particular emphasis on architecture and sculpture and their purpose in cultural activities. Course will draw from art historical and archaeological approaches. Note: a special fee for a field trip is assessed. Prerequisite: AR 110 or AR 115.

AR 312 Medieval Art and Architecture 3 **Alternate Years** **FI**
Fall or Spring **CW**
Concentrates on the arts and architecture of Europe from 300 to 1250. Works are drawn from the late Antique, Byzantine, Migratory, Carolingian, Ottonian, Romanesque, and Gothic periods. Special emphasis on the relationship between religious and political forces and how they effected the arts of this era. Note: a special fee for a field trip is assessed. Prerequisite: AR 110 or AR 115.

AR 313 Gothic and Renaissance Art 3 **Alternate Years** **FI**
Fall or Spring **CW**
Study the arts in Europe from 1250 to 1500 with particular emphasis on the trans-alpine relationship of artists in Italy and Northern Europe (France, Germany, and the Netherlands). Artists to be considered include Giotto, Duccio, the Lorenzetti, Martini, the Limbourgs, Campin, Van Eyck, Durer, Masaccio, Ghiberti, and Leonardo da Vinci. Note: a special fee for a field trip is assessed. Prerequisite: AR 110 or AR 115.

AR 314 Mannerism and Baroque Art 3 **Alternate Yrs** **FI**
Fall or Spring **CW**
Focuses on the controversial nature of "Mannerism" and the emergence of the Baroque in European art. Michelangelo, Bramante, Leonardo, Raphael, Parmigianino, Titian, Bosch, Bruegel, Grunewald, Caravaggio, Berninini, Rubens, Rembrandt, Vermeer, and Poussin are among the artists studied. Note: a special fee for a field trip is assessed. Alternative Prerequisites: AR 110.

AR 315 Women in Art 3 **Alternate Yrs** **FI**
Fall or Spring **CS**
A study of women artists and images of women in art, from a variety of approaches—aesthetic, historical, philosophical, social, economic, and political—this course seeks to understand, appreciate, and integrate the role and contributions of women into the history of western art. Note: a special fee for a field trip is assessed. Prerequisite: AR 110 (A CA II course).

AR 316 19th Century Art 3 **Alternate Yrs** **FI**
Fall or Spring **CS**
An in-depth study of nineteenth century painting and, to a lesser extent, sculpture, this course will examine Neoclassicism, Romanticism, Realism, Impressionism, and Post-Impressionism. Although the art of France will receive primary focus, the artistic achievements of other countries such as England, Germany, Italy, and the United States will be discussed as well. Note: a special fee is assessed. Prerequisite: AR 110.

AR 317 20th Century Art 3 **Alternate Yrs** **FI**
Fall or Spring **CS**

Chronicles achievements in painting, sculpture, and architecture from the turn of the twentieth century to the present, in the United States as well as in Europe. Such styles as Art Nouveau, Fauvism, Expressionism, Cubism, Dada, Surrealism, Abstract Expressionism, Pop Art, Minimalism, New Realism, and Post Modernism will be addressed. Note: a special fee for a field trip is assessed. Prerequisite: AR 110.

AR 318 American Art 3 **Fall or Spring** **F**
CS

A survey from the colonial era to the present, the focus of this course will be an examination of American painting, while major monuments in sculpture and architecture will also be surveyed. General topics of study include: landscape, genre, the wilderness, the visionaries, the expatriates, the common man, the Eight, the avant-garde, politics, abstract expressionism, Pop art, Earth art, and contemporary art. Note: a special fee for a field trip is assessed. Prerequisite: AR 110.

AR 319 Impressionism 3 **Alternate Yrs** **FI**
Fall or Spring **CS**

This course will begin with the roots of Impressionism in France and England, and continue chronologically through the later lives of the Impressionists. Biographies and individual styles of the French Impressionists will be highlighted, and comparisons to other lesser-known French and American Impressionist artists will occur. Manet, Degas, Monet, Renoir, Pissarro, Sisley, and Morisot will be the major French Impressionists studied here. Note: a special fee for a field trip is assessed. Prerequisite: AR 110.

AR 320 Japanese Ceramics 3 **Odd Years** **FI**
Spring **CW**

A studio ceramics course in pottery and sculpture with an art history component. Lectures, slides, and readings will comprise approximately one quarter of the course, with the remainder given to studio work. The Joman and Haniwa eras, as well as raku, underglaze decoration, and anagama firing are the five approaches we will investigate. Note: a special fee for a field trip and art supplies is assessed. Prerequisite: AR 205.

AR 325 American Architecture 3 **Alternate Years** **F**
Fall or Spring **CW**

Form follows function in this in-depth examination of American architecture. Beginning with Colonial structures, students will be exposed to major styles and trends in American building practices including the works of Jefferson, David and Downing, Richardson, Sullivan, Wright, and Graves. Prerequisite: AR 110.

AR 340 Philosophy of Art 4 **Fall** **FH**

(see PL 340)

AR 390 Arts Management/Museum Studies I 3 **Alternative Yrs** **FS**
Fall

Introduces students to the history and role of pubic museums. Examines the emergence of the American museum and the political, social, and ethical issues that confront museum curators. Case studies include: government funding of the arts, the lure of the Blockbuster, the Nazi Entartete Knust exhibition, the Enola Gay exhibition, the Vietnam and other Veterans Memorials, the Holocaust Museum, art conservation, and the repatriation of cultural property. Although designed as the first of a two part sequence in Museum Studies, this course is open to all students and would be especially interesting to those studying art, public policy, public relations, and United States History. Alternate Prerequisites: AR 110 or AR 115.

AR 391 Arts Management/Museum Studies II 3 **Alternative Yrs** **F**
Spring

Represents the second in the two-course Arts Administration/Museum Studies series. It builds upon the earlier course by putting history and theory into practice. Students are introduced to a number of the museum professions including: the museum registrar, museum data-base designer, curator, exhibition designer, object preparator, catalogue editor, and public relations officer. This course

works with objects in the collection and introduces students to proper curatorial techniques. The final project requires students to design their own exhibition, catalogue, and gallery installation model. Prerequisite: AR 390.

AR 399 Special Topics in Art 3 **Fall or Spring** F

Allows the art department to offer, from time to time, courses in areas of studio art and art history that fulfill specific curricular needs but do not warrant regular scheduling. Note: a special fee may be assessed. Additional prerequisites may be announced as necessary. Prerequisite: AR 110.

AR 404 Digital Photography 3 **Spring** F

Digital Photography is designed to build on the students' understanding developed in the Computer Art courses and the Basic Photography course. The computer has brought the medium of photography into the digital age and this course will prepare students to work with the options that the new technology offers. Combining the flexibility of the computer art applications with the forms created by the camera will facilitate new visual ideas that will especially benefit students who are majoring in Studio Art, Computer Technology and Information Technology. Note: a special fee for art supplies and a field trip is assessed. Prerequisites: AR 204.

AR 405 Advanced Ceramics Studio 3 **Spring** F

Offers the experienced student in ceramics the opportunity to explore more complex problems of expression in ceramics. Note: a special fee for art supplies is assessed. Prerequisite: AR 305.

AR 455 Senior Thesis in Art History 4 **Fall** F CW

Involves one full semester of intensive research and writing. A thesis statement, bibliography, and outline are to be followed by a rough draft which is expected by mid-term. After revisions, the completed paper is due by the end of the semester. Students may choose to write about a specific work (or several works) of art, and relevant artists, styles, influences, etc. The thesis may be comparative, but it must be analytical. Prerequisite: permission.

AR 480 Museum Practicum I 2 **Fall & Spring** F

Provides a select number of students with an opportunity to organize, design, handle, and install exhibitions hosted by the Juniata College Museum of Art. Students will learn the mechanics of curatorial work, as well as exhibition preparation, documentation, promotion, and shipping. The course is designed to prepare students for internships at regional and national museums and for entrance into graduate programs in Museum Studies. Prerequisite: Permission of the instructor.

AR 481 Museum Practicum II 2 **Fall & Spring** F

Builds on skills acquired in Museum Practicum I. Provides further work experience and refines the student's curatorial skills. Students may be assigned independent projects as they relate to various aspects of scheduled exhibitions. Will be responsible for helping to instruct and assist the Museum Practicum I students. Prerequisite: AR 480.

BIOLOGY (BI)

	Office
Associate Professor Bennett	BSC/B309
Professor J. Demarest (Chair of Biology)	BSC/B231
Professor Glazier	BSC/B229
Professor Gooch	BSC/B203
Professor Gustafson	BSC/B303
Assistant Professor Hostler	BSC/B213
Associate Professor Keeney	BSC/B313
Professor Kirchhof-Glazier (Director of Health Professions)	BSC/B227
Assistant Professor Matter	BSC/B217

Background Information:

Biology is an extremely popular subject with Juniata students: approximately one third of all Juniata students have a Program of Emphasis that relates to biology one way or another. These students form a "critical mass" of high quality peers interested in all facets of biology. Their interactions contribute extensively to a first class experience in the liberal arts education. With biology as a focus, students may pursue a variety of areas in pre-professional education, such as pre-medical, pre-optometry, or pre-veterinary. Other students choose to concentrate on cell and molecular biology, medical technology and other allied health areas, secondary education, or other areas of life science.

Special programs, facilities, or equipment:

- The Raystown Environmental Studies Field Station, 665 acres of land available for college use.
- 24-hour access to state of the art teaching and research equipment.
- Internship opportunities
- Articulation agreements for programs affiliated with other institutions.
- Biological Honor Society (Tri-Beta)
- Health Occupations Students of America (HOSA)
- Conservation Club
- Study Abroad Options

Programs of Emphasis:

- Biology

Student Designed Programs of Emphasis:

- Biology/Pre-Med
- Biology/Pre-Veterinary
- Biology/Pre-Chiropractic
- Biology/Marine Science
- Molecular Biology
- Biology/Communication
- Biology/Secondary Education

Internship/Research Experiences:

- Brigham and Women's Hospital
- Penn State Geisinger Medical Center
- J.C. Blair Memorial Hospital

BI 111 Biology I 3 **Fall** N

The introductory course for students pursuing programs of emphasis in biology, the health professions, or social work. Lectures which cover chemistry, the cell, molecular biology, and human physiology, are complemented by discussions that stress critical thinking and practical application of the concepts. Note: BI 121, the lab for this course, requires CH 105 as a corequisite. Non science majors have the option of taking BI 111 without BI 121.

BI 113 Biology II 3 **Spring** N

Designed to complement BI 111, this course is required to complete the introduction to biology for students in the life and health sciences. Topics covered include evolution, ecology, and the diversity of life. Note: BI 122, the lab for this course, requires CH 106 as a corequisite. Non science majors have the option of taking BI 113 without BI 122.

BI 121 Chemistry-Biology Lab I 2 **Fall** N QS

A laboratory-based introduction to the basic principles and techniques of scientific investigations that are relevant to both biology and chemistry. The course consists of four modules, each of which is devoted to a specific area. Information retrieval/note taking, physiological measurements, organic chemical/physical techniques, and separation methods will be studied. Emphasis will be placed in each module on experimental design, statistical treatment of data, developments of rigorous laboratory skills and preparation of scientific manuscripts. Also listed as CH 121. Note: a special fee is assessed. Corequisite: CH 105.

BI 122 Chemistry-Biology Lab II 2 **Spring** N QS

A continuation of CH 121/BI 121. All students will do the first two modules. In the second half of the semester, biology-oriented students will do two modules that are more biology-relevant, while chemistry-oriented students will do two organic chemistry-specific modules. Also listed as CH 122. Note: a special fee is assessed. Prerequisite: CH 121 or BI 121. Corequisite: CH 106.

BI 210 Genetics 3 **Spring** N

Examines the structure and organization of DNA and the replication and transmission of genes. Prokaryote genetics, gene fine-structure and mapping, gene regulation and developmental genetics, transmission of genes, human genetics, and medical genetics are included. Corequisite: BI 212. Prerequisite: BI 222.

BI 212 Genetics and Cell Biology Laboratory 1 **Spring** N

This course is designed as a complementary laboratory experience to follow BI 222 Cell Biology and accompany BI 210 Genetics. Experiments include yeast and *Drosophilia* genetics, Southern blotting and hybridization to detect DNA, electrophoresis of proteins and nucleic acids, and cell organelle techniques, such as centrifugation, spectroscopy, and fluorescence microscopy. Prerequisite: BI 222, co-requisite: BI 210.

BI 222 Cell Biology 3 **Fall** N

An introduction to cell biology emphasizing unifying concepts of cell structure, function and quantitative relationships illustrated with prokaryotic and eukaryotic, both plant and animal, examples. Prerequisites: BI 113 and CH 106 or permission.

BI 231 Microbiology 3 **Fall** N

Focuses on the structure, function, growth, genetics, and ecology of viral, bacterial, and fungal microorganisms. Basic concepts are emphasized and topics important to the quality of human life are examined. Corequisite: BI 232. Prerequisite: BI 113 & CH 106.

BI 232 Microbiology Laboratory 1 **Fall** N

Presents procedures and experiments which demonstrate basic microbiological concepts and techniques. Illustrates and augments the content of the lecture. Note: a special fee is assessed. Corequisite: BI 231.

BI 289 Biology Seminar 1 **Fall & Spring** N

Seminar series, required in all Biology POEs in the Sophomore year, consisting of research seminars given by invited speakers and members of the department, both faculty and students. Descriptions of independent research, internship and study abroad opportunities as well as reports by students and faculty on experiences in these programs will be presented. Graded S (satisfactory) or U (unsatisfactory).

BI 300 General Ecology 3 Spring N

Examines the interactions of living organisms with their physical, chemical and biotic environments. Special attention is given to the environmental, biological, and historical factors affecting the distribution, abundance, adaptation, and diversity of species in natural communities. This course deals with "ecological principles", and as such complements the Introduction to Environmental Science and Studies course, which deals with "environmental issues." Prerequisite: BI 113 and BI 122 or permission of the instructor.

BI 301 General Ecology Laboratory 1 Spring N

Students work together as research teams to carry out original investigations on the ecology of local species and natural communities. Emphasis on ecological research design, data collection and analysis, and oral and written presentation of results. Frequent field trips are included. Note: a special fee is assessed and one optional field trip requires an additional fee. Corequisite: BI 300.

BI 305 Biostatistics 3 Spring N QS

This course deals centrally with quantitative and statistical methodology in the biological sciences. It includes experimental design and the conventions of generating, analyzing, interpreting, and presenting biological data. Counts as a math course for graduate and professional school requirements. Note: Normally only ND.SS 214 or BI 305 may be taken for credit.

BI 307 Molecular Techniques 3 Spring N CW

A laboratory course designed to cover standard molecular biology and biochemistry techniques. Skills will be learned while pursuing some aspect of current faculty research. Intended as an introduction to the research experience in the study of nucleic acids and proteins. Strongly recommended for students considering summer internships and/or senior research in these areas. Prerequisites: CH 301, BI 222 and BI 210 and permission. Pre- or corequisite: BI 420.

BI 310 Physiology 4 Spring N CW

A combined laboratory and lecture course which examines the function of cells, tissues, organs, and systems. Physical, mathematical, chemical, and anatomical concepts are integrated to gain a comprehensive appreciation of the dynamics of living systems. An in-depth exposure to the use of physiological instrumentation, experimental design, collection and statistical analysis of data, and preparation of scientific manuscripts. Laboratory experiments amplify and complement the lectures. Prerequisites: BI 222 or permission.

BI 316 Biochemistry and Molecular Biology II 3 Spring N CW

A comprehensive approach to the study of eucaryotic cells merging related studies from genetics to protein chemistry. Analysis of the cell at the molecular level emphasizes a unity in the principles by which cells function. Prerequisites: BI 210, BI 222 and CH 301.

BI 325 Plant Ecology and Systematics 2 Fall N CW

Primarily an ecology course, but also included is a significant amount of plant identification/classification and collection. The ecology portion will focus on forest ecosystems and succession. Corequisite: BI 326. Prerequisites: one year of college biology and junior/senior standing.

BI 326 Plant Ecology and Systematics Laboratory 2 Fall N CW

The first 10 weeks are devoted to laboratory work on the identification of the local anthophyte flora. Students are required to make a personal collection representing a minimum of 8 families and are expected to become proficient in using a scientific manual. During the 5th and 6th week there is a mandatory all day field trip to collect forest data. An extensive paper on forest succession will be due by semester's end. Note: a special fee is assessed.

BI 328 Limnology 3 Spring N

An ecology/environmental science course covering inland aquatic environments (lakes and streams). A balanced study of both physical-chemical and biological aspects, it is an appropriate upper level addition to a variety of POEs in the natural sciences. BI 329 is optional. Prerequisites: POEs in the natural sciences, junior/senior standing.

BI 329 Limnology Laboratory 1 Spring N
Student-conducted laboratory work that will parallel the topics covered in BI 328. Field work will be conducted during several trips to Raystown Lake. Note: a special fee is assessed. Corequisite: BI 328.

BI 334 Immunology 3 Fall N CW
Covers the properties of antigens, antibodies and complement, humoral and cell-mediated immunological systems, antigen-antibody interactions, and hypersensitivity reactions. Prerequisites: BI 210 and CH 230

BI 337 Comparative and Evolutionary Psychology 3 Fall NS
(see PY 337)

BI 338 Biopsychology 3 Spring NS
(see PY 338)

BI 339 Organic Evolution 3 Spring N CW
Examines how evolutionary theory can explain the characteristics, diversity, and interrelationships of living (and extinct) organisms on earth, and how it can be applied to everyday life. Major topics include the history of Darwinism, population genetics, adaptation, coevolution, Darwinism medicine, systematics, the fossil record, molecular evolution, evolutionary developmental biology, macro evolution, human evolution and sociobiology. Prerequisite or Corequisite: BI 210.

BI 341 Plant Morphology 2 Spring N
The study of algae, fungi, and plants concentrating on form and structure. Attention is also given to identification, classification, evolution, and form-related function. Designed for sophomores and juniors, the course is especially recommended for programs in ecology and biology/education. Corequisite: BI 342. Prerequisite: BI 113 or permission.

BI 342 Plant Morphology Laboratory 2 Spring N
Students will study an extensive collection of specimens and slides that will provide first-hand experience with the organisms covered in BI 341. Note: a special fee is assessed. Corequisite: BI 341.

BI 350 Invertebrate Zoology 2 Fall N
Focuses on the organizational plan, behavioral and ecological adaptation, diversity, and economic importance of representative members of the major invertebrate phyla. Marine forms are emphasized. Corequisite: BI 351. Prerequisite: BI 113.

BI 351 Invertebrate Zoology Laboratory 2 Fall N
Illustrates and augments the content and concepts of the lecture through direct observation and/or dissection of selected representative organisms. Corequisite: BI 350. Note: a special fee is assessed.

BI 360 Vertebrate Zoology 2 Fall N CW
Focuses on the vertebrate animals of the Eastern United States. Collection, taxonomic identification, and natural history are emphasized. Corequisite: BI 361. Prerequisites: Ecology/Biology related POE; junior/senior standing.

BI 361 Vertebrate Zoology Laboratory 2 Fall N
Frequent field trips, for observation and specimen collection, are followed by exercises in identification, specimen preparation, and museum techniques to illustrate and augment the concepts and content of the lecture. Note: a special fee is assessed and one optional field trip requires an additional fee. Corequisite: BI 360.

BI 367 Comparative Anatomy 3 Spring N
A study of the structural organization of the chordate animal. Each of the major organ systems is reviewed with attention to general pattern, comparative details in representative vertebrate groups, development, and structure-dependent function. Corequisite: BI 368. Prerequisite: BI 113.

BI 368 Comparative Anatomy Laboratory 1 Spring N
Provides additional content to further illustrate the lecture. Emphasis is placed upon the dissection of selected representative vertebrates. Note: a special fee is assessed. Corequisite: BI 367.

BI 389 Biology Research Seminar 1 Fall & Spring N CW

Lectures, discussions and student exercises covering such topics as ethics in research, writing effective research proposals and the effective written and oral communication of research results. Professional research and educational societies, government and private funding of research in the United States and other countries and career opportunities will also be discussed. Required as a corequisite for all students during their initial semester of enrollment in BI 489 Biology Research.

BI 399 Special Topics 1-4 Fall or Spring N CW

Offered at the discretion of the department to qualified students. Topic titles may vary from semester to semester and more than one may be offered per semester. Note: abbreviated ST: (Title); students may take each ST: course for credit and a special fee is assessed. Prerequisite: permission of the instructor, or as indicated.

BI 432 Environmental Toxicology 3 Fall N CW

Broadly integrative in nature, this class examines the fate and actions of xenobiotic compounds in environmental systems and focuses on the potential for deleterious consequences in wildlife species and humans. Examines aspects of chemistry, cell biology and ecology in considering environmental contamination. Instruction includes lectures and student presentations/writing exercises. Prerequisites: BI 113 and CH 106 or CH 130, and one of the following; BI 222, BI 300, CH 230/240.

BI 462 Histology 3 Fall N

A study of the microscopic anatomy of vertebrate animals with an emphasis on the mammalian (human) pattern. Lectures include frequent use of photomicrographs to illustrate the contents. Corequisite: BI 463. Prerequisite: At least one 300 level biology course (BI 310 or BI 367 preferred).

BI 463 Histology Laboratory 1 Fall N

Observation of the microscopic structure of vertebrate tissues and organs using the light microscope. Electron photomicrographs are included where appropriate. Illustrates and augments the content and concepts of the lecture. Note: a special fee is assessed. Corequisite: BI 462.

BI 475 Microscopy 3 Fall N

Provides technical experience in the basics of various forms of light and transmission electron microscopy. Tissue preparation, sectioning and staining, instrument operation, photography, and interpretation of photomicrographs are included. The format is tutorial and each student is required to submit a portfolio of photomicrographs. Note: a special fee is assessed. Prerequisite: permission.

BI 489 Biology Research 2-6 Fall & Spring N

Individual research projects directed by faculty members and based on proposals submitted in BI 389, Biology Research Seminar. Presentation at a professional meeting is encouraged. May be repeated for up to 15 credits. Pre- or Corequisite: BI 389 and permission.

BI 490 Biology Internship 2-9 Fall & Spring N

Note: may be repeated up to a total of 9 hours of credit. Corequisite: BI 495. Prerequisite: permission.

BI 495 Internship Research/Seminar 2-6 Fall & Spring N

Requires students to reflect on the experience and/or pursue relevant research. Corequisite: BI 490. Prerequisite: permission.

BI 499 Senior Thesis 3 Fall & Spring N CW

This course is the culmination of an individual research project initiated in BI 489. Students will complete their projects by writing a paper describing their research. This paper will be of significant length and contain full documentation of the student's original research. The thesis will be presented to faculty and students at the yearly campus-wide Juniata Student Research Symposium. Prerequisite: BI 489 and permission.

CHEMISTRY (CH)

	Office
Professor T. Fisher	BSC/C203
Professor Mitchell	BSC/C201
Professor Ochiai (Foster Professor)	BSC/C206
Professor Reed	BSC/C207
Professor Reingold	BSC/C209
Professor Russey (Dana Professor) (Chair)	BSC/C202
Professor Schettler (Brumbaugh Professor)	BSC/C223

Background Information:

Juniata's chemistry department offers thorough training in modern and experimental chemistry. The chemistry department has a long-standing reputation for excellence in the undergraduate training of professional chemists. Juniata ranks fourth in the nation in the percentage of graduates who have gone on to earn a Ph.D. in chemistry. Traditional goals remain the same but considerable attention is now directed towards students with more interdisciplinary interests due to the increasing demand for scientists of all capabilities.

Special programs, facilities, or equipment:

- Soon to move to a new facility explicitly designed to encourage undergraduate research
- Curriculum that is unique in the nation
- Wealth of sophisticated instrumentation is accessible to students, including equipment for performing 200MHz NMR, FTIR, UV-Vis, GC-MS, and fluorescence measurements
- Cold room and glass blowing laboratory
- Chemistry stockroom maintains an unusually complete inventory of chemicals and apparatus
- Students actively engage in challenging laboratory activities

Programs of Emphasis:

- Chemistry
- Biochemistry
- Chemistry/Secondary Education

Student Designed Programs of Emphasis:

- Environmental Science/Chemistry

Internship/Research Experiences:

- Most students engage in some form of research as early as their sophomore year
- Many students become "visiting researchers" at other institutions: Pennsylvania State University and Argonne and Oak Ridge National Laboratories

CH 100 Chemistry in the World Around Us 3 **Fall** N
This course is designed for students whose programs of emphasis are not in the natural sciences but who have an interest in chemistry. The course makes use of phenomena that students encounter in their lives every day to teach basic chemical principles. For example, the atmosphere might be used as a model for gaseous systems. This course shows how scientists use observations and deductive reasoning to develop scientific principles.

CH 101 Preparation for College Chemistry 3 **Spring** N
Provides practice with the skills and concepts necessary for the study of chemistry at the college level. Emphasizes proportional reasoning in determining amounts of materials from balanced chemical equations and in preparing solutions, use of logarithms in pH and equilibrium measurements, and the concepts of atomic and electronic structure, including energy levels and Lewis structures. This course does not meet requirements for chemistry coursework for most post-baccalaureate professional programs in the sciences.

CH 105 Organic Chemistry Concepts I 3 **Fall** N
An introduction to the principles and methodology of chemistry as revealed particularly by the behavior of compounds of carbon ("organic" compounds). Topics treated include matter and its properties, atomic and molecular structure, elementary thermodynamics and kinetics, and spectroscopy, as well as the reactivity of simple organic systems.

CH 106 Organic Chemistry Concepts II 3 **Spring** N
A continuation of the work begun in CH 105. Most of the attention will be directed toward an overview of the chemistry of increasingly complex organic systems, with particular emphasis on chemistry's impact on everyday life and molecular structures relevant to living systems. The logical thinking involved in structural analysis and in preparing large molecules from appropriate simpler building blocks is also stressed. Prerequisite: CH 105.

CH 121 Chemistry-Biology Lab I 2 **Fall** N QS
A laboratory introduction to those principles of scientific investigation that are relevant to both biology and chemistry. The CH 121/122 sequence covers library use, analysis of data, and experimental design. Laboratory modules provide lab experience in areas such as organic synthesis, scientific measurement, and ecological field work. Note: a special fee is assessed. Corequisite: CH 105. Also listed as BI 121.

CH 122 Chemistry-Biology Lab II 2 **Spring** N QS
A continuation of CH 121/BI 121. Prerequisite: CH 121 or BI 121. Corequisite: CH 106. Also listed as BI 122.

CH 225 Physical Inorganic Chemistry 4 **Spring** N
A course for students continuing past the introductory course in chemistry and who are not emphasizing chemistry or the life sciences. Emphasis is placed on chemical equilibrium, thermodynamics, kinetics, and the inorganic elements. Application of these principles to the areas of chemistry, geology, and physics is addressed. Note: a special fee is assessed. Prerequisites: CH 105, CH 121.

CH 230 Introduction to Bioinorganic Chemistry 3 **Fall** N
Third course in the introductory sequence for students requiring two years of chemistry with laboratory. Emphasis is placed on inorganic chemistry and physical chemistry principles especially relevant to biology. This course is intended for students whose major interest is in a field other than chemistry. Prerequisite: CH 105 or permission.

CH 240 Inorganic Chemistry 3 **Fall** N
Similar to CH 230 but intended for students whose primary interest is chemistry. Emphasis is placed on inorganic chemistry and relevant aspects of physical chemistry. Prerequisite: CH 105 or permission.

CH 241 Chemical Synthesis 2 **Fall** N
A laboratory experience in organic and inorganic synthesis and the characterization of synthetic products. Note: a special fee is assessed. Prerequisite: CH 122. Corequisite: CH 230 or CH 240.

CH 250 Analytical Chemistry 5 **Spring** N
Theory and practice of quantitative chemical analysis. Stoichiometry, redox, statistics, spectrophotometry, and chromatography are discussed. Note: a special fee is assessed. Prerequisite: CH 225, CH 230, or CH 240.

CH 289 Chemistry Seminar 1 Fall N

This one-credit seminar is designed as a forum to present students with knowledge of (1) departmental and college resources, including research and internship opportunities; (2) the wide range of post-baccalaureate programs available to students with bachelors' degrees in chemistry or biochemistry; and (3) career opportunities and how to learn about them. Students normally take this sophomore year. (This is graded on a pass/fail basis.)

CH 301 Biochemistry and Molecular Biology I 3 Fall N

Focuses on the application of organic chemistry to biological systems. Protein structure and function, particularly in metabolism, is stressed. Prerequisites: CH 106, CH 250, BI 222, and either CH 230 or Ch 240.

CH 305 Physical Chemistry I 3 Fall N

Introductory physical chemistry covering thermodynamics and chemical kinetics. Prerequisites: PC 203 & MA 230 and additional quantitative experiences in mathematics, chemistry, and/or physics.

CH 306 Physical Chemistry II 3 Spring N

Continuation of CH 305. Course covers introductory quantum chemistry, statistical thermodynamics, and non-equilibrium phenomena. An introduction to computational chemistry software is included. Prerequisite: CH 305.

CH 315 Chemical Measurements 3 Fall N CW

Provides a survey of modern chemical instrumentation and techniques. Chemical analysis and statistical interpretation are emphasized. Prerequisite: CH 250. Corequisite: CH 305 or permission.

CH 316 Physical Chemistry Lab 3 Spring N CW

Experimental physical chemistry. Calorimetric, electrochemical, and spectroscopic and similar measurements are used to determine a variety of thermodynamic and non-equilibrium properties. Prerequisite: CH 315. Corequisite: CH 306.

CH 321 Organic Reactions 3 Fall N

A continuation of the study of organic chemistry begun in CH 105 & 106. Special emphasis is placed on advanced aspects of structure and reactivity, with careful attention to the methodology and tools of synthesis. The use of spectroscopy in the solution of structural problems also plays a major role. Prerequisite: CH 106.

CH 322 Scientific Glassblowing 1 Spring N

Practical repair and construction of scientific glassware.

CH 399 Special Topics 3 Variable N

Advanced, specialized topics in chemistry and related areas. Topic titles may vary from semester to semester, and more than one may be offered per semester. Note: abbreviated ST:(title); students may take more than one "ST:" course for credit. Offered at the discretion of the department to qualified students.

CH 401 Advanced Organic Chemistry 3 Spring N

Discusses selected topics in organic chemistry with emphasis on general principles, including chemical bonding. Recent literature is used. Prerequisites: CH 321 and CH 305.

CH 402 Quantum Mechanics 3 Spring N

A rigorous introduction to the fundamentals of quantum mechanics, including topics such as the Schrödinger Equation, the "particle-in-a-box", the harmonic oscillator, angular momentum, the hydrogen atom, theorems of quantum mechanics, and electron spin. Time permitting, some attention may be given to philosophical issues arising out of the theory. Prerequisites: (MA 235 or PC 340) and (CH 305 or PC 300).

CH 405 Industrial Chemistry 3 Odd Years Fall N

Studies processes pertinent to industrial settings. Topics include raw material sources and production of major chemicals, overall material and energy balances, experimental design for industrial research, patent requirements and economics. Prerequisites: MA 130, CH 250, CH 305 or permission.

CH 406 Advanced Inorganic Chemistry 3 **Spring** N
Emphasizes the properties and reactions of inorganic compounds as they relate to structure, bonding, and other theoretical models. Prerequisite: CH 305.

CH 416 Biochemistry and Molecular Biology III 3 **Fall** N CW
A seminar designed to integrate material covered in BI/CH 301 and BI 316 with areas of current interest in biochemistry and related areas. Prerequisite: BI/CH 301, BI 316, or permission.

CH 430 Polymer Chemistry 4 **Even Years Fall** N
Covers the chemical and physical properties of macromolecules. Methods of synthesis and characterization of high molecular weight compounds are studied. Particular attention is paid to the relationship between structure and properties. Prerequisites: MA 130, CH 250, CH 305 or permission.

CH 450 Introduction to Chemical Research 4 **Fall** N CW
An independent research experience that includes preparation of a research proposal. Students present research results during weekly seminars. Prerequisite: permission.

CH 451 Advanced Chemical Research 3-6 **Spring** N CW
A continuation of Introduction to Chemical Research. An in-depth research project is pursued based on the proposal prepared during CH 450W. Students present research results during weekly seminars and present a formal research paper off campus. Prerequisite: CH 450.

CH 490 Chemistry Internship 2-9 **Fall & Spring** N
(see the chapter, "Special Programs" under Internships.) Note: may be repeated up to a total of 9 hours of credit. Corequisite: CH 495. Prerequisite: permission.

CH 495 Internship Research/Seminar 2-6 **Fall & Spring** N
Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: CH 490. Prerequisite: permission.

COMMUNICATION

(see English, Communication, & Theatre Arts)

COMPUTER SCIENCE

(see Mathematics and Computer Science)

CULTURAL ANALYSIS (CA)

Associate Professor Lewis (Coordinator of General Education) — *Office* Good 405

The Cultural Analysis (CA) core consists of two courses which are designed to develop the necessary skills to identify, understand, and analyze culture. CA I courses equip students with the skills to think critically about culture from a variety of theoretical and comparative perspectives. Students are introduced to a variety of different texts and media selected to stimulate discussion of the nature of modernity and how the interactions between proponents and opponents of the modern have shaped the world in which we live. For the second Cultural Analysis course students have a choice from among a list of courses designed to enhance their skills in identification, understanding and analysis of culture. The CA II courses for the 1999-2000 Academic Year are listed below beginning with CA 202.

CA 200 Political and Cultural Modernization 4 Spring C CW

Examines the processes of globalization and modernization and the changing political and cultural ideas, which have accompanied them. Uses various media and material from different cultures to ask who and where we are and how we got there. An alternative to CA 201. Prerequisite: EN 110.

CA 201 The Modern: A Perspective 4 Fall C

This course examines important aspects of modernity in the West. Material presented first introduces what might be called the "premodern" Western worldview and traces the way this mindset was affected by certain important "seeds" of modernity. What follows is a description of several characteristic assumptions inherent in modern culture. In particular, the changing role of the individual is considered, as is increasing dominance by the secular side of life. An overview is provided of significant developments in the fields of economics, science, and technology, with attention to an emerging faith in a notion of "progress." Consideration is also directed toward criticisms of the modern and to costs that may have been incurred in the course of its widespread acceptance.

CA 201 Modern Knowledge & Self 4 Spring C

CAI examines ideas behind the scientific, philosophical, political, economic, and social structures, systems and beliefs that inform perceptions and definitions of the modern world. The course materials are meant to simulate discussion about the assumption that to be "Western" is to be "modern" and about the tendency to divide the world along the fault line of the modern.

CA 201 Napoleon to Monnet 4 Spring C CW

"From Napoleon to Monnet" will be an interdisciplinary inquiry into a period of time from the rise of Napoleon Bonaparte to the birth of the Europeon Union under the leadership of Jean Monnet. It will use the lives of two Frenchmen as biographical bookends to a historic era that saw the birth of the nation state, patriotism, modern total war, nonviolent resistence, global economic interdependence and international military forces. It will explore the lives of two men, Napoleon and Jean Monnet, who could arguably be considered history's greatest warrior and greatest peacemaker respectively. It will look at their lives in the context of a slice of history and a global culture that gave rise to Hitler, Gandhi, and Rock and Roll.

CA 201 Identity in the Modern World 4 Spring C

CAI examines the cultural structure, systems, and beliefs that inform perceptions and definitions of the modern world. This course will explore how the concept of the "modern" informs and impacts how identities (racial, ethnic, gender, national, etc.) are shaped and constructed. We will use the tools of the modern (texts, film, television, and the web) to explore understandings of our own identities, as well as identities that are less familiar.

CA 202 Francophone Literature in Translation 3 Spring C CW,CS
(See FR 202)

CA 203 Women in Slavic Literature 3 Fall C CW,CS
(See RU 201)

CA 209 Russian History (See HS 209)	3	Fall	C
CA 211 Social History of Medicine (See HS 211)	3	Spring	C CW
CA 213 Min Economic Pol & Law (See GL 213)	3	Fall	C CW
CA 235 Tolstoy (See RU 235)	3	Spring	C
CA 251 Science in Western Culture (See ND 251)	4	Spring	C CW
CA 263 Islam and the West (See HS 263)	3	Spring	C CW
CA 295 Erotic-Ascetic: The Culture of India	3	Fall & Spring	C CW

Explores central themes in Indian culture as expressed in religious traditions, the arts, literature, social organization and political thought. Taking contemporary Indian culture as a point of departure, the course will explore origin and development of these themes by analyzing seminal moments in Indian cultural history, ranging from the Vedic Age to the British Raj (1000 BC-1947).

CA 302 Franchophone Literature in Translation (See FR 302)	4	Spring	C CW,CS
CA 315 Women in Art (See AR 315)	3	Fall	C
CA 335 Tolstoy (See RU 335)	4	Spring	C
CA 372 Contemporary Poetry (See EN 372)	3	Fall	C
CA 355 The Idea of War (See PACS 355)	3	Fall	C CW,CS

EDUCATION (ED)

	Office
Associate Professor Byron (Chair)	Good 304
Associate Professor DeHaas	Good 303
Professor Glosenger (Martin G. Brumbaugh Professor of Education)	Good 306
Assistant Professor Long	Good 305
Associate Professor Pauline	Good 315
Professor Richardson	Good 308
Director of Clinical Experiences Paula Beckenbaugh	Good 208

Background Information:

Juniata has Pennsylvania Department of Education accredited certification programs in Early Childhood Education, Elementary Education, 12 secondary areas, and Special Education. Certification programs requirements and standards are rigorous and throughout their program department faculty closely monitor students' academic progress. An education POE's direct field experiences begin early and continue over the four years

Special programs, facilities, or equipment:

- Study Abroad exchange program for Elementary Education students at the University College of Ripon & York St. John in the United Kingdom
- Practicum experiences in local public schools
- The department is affiliated with a number of public school projects and community agencies to provide students with independent field experiences
- Early Childhood Center on Campus
- MAC computer lab

Programs of Emphasis:

- Early Childhood Education
- Elementary Education
- Secondary Education Certification areas: Communications, English, Spanish, French, German, Mathematics, Chemistry, Physical Chemistry, Biology, Geological Science, Earth & Space Science, and Social Studies
- Unified Early Childhood and Special Education
- Unified Elementary and Special Education.

Field Experience:

- Multiple practicum experiences in early childhood and public school settings
- Two-semester practicum sequence: pre student teaching semester and full student teaching placement with the same cooperating teacher

ED 110 Foundations of Education 3 **Fall & Spring** S
Discusses the historical and contemporary bases of major political, economic, legal, sociological, and psychological issues affecting public school systems. Students review current issues in education and write a personal philosophy statement. Corequisite: ED 111.

ED 111 Foundations of Education Practicum 1 **Fall & Spring** S
The practicum experience is an integral component of the teacher-training model at Juniata College. The purpose of the practicum is to provide teacher education candidates with an opportu-

nity to observe the application of multiple philosophies, concepts, theories, and strategies in a classroom setting. Corequisite: ED 110.

ED 120 Child Development 3 Fall & Spring S
Examines typical and atypical human physical, cognitive, and social-emotional development and behavior from conception through middle childhood. Topics include prenatal development and factors that contribute to at-risk conditions, language, personality, social behavior, parenting, the role of the school, and theories of learning and development. Assignments include direct observations of young children. Prerequisite: None. Education majors must take ED 121 with ED 120.

ED 121 Child Development Laboratory 1 Fall & Spring S
Interaction with toddlers and preschoolers in the Early Childhood Education Center. Interaction strategies and styles are modeled and discussed. Includes anecdotal recording of children's behavior and interpretation of that behavior in light of developmental theory. Preference is given to students seeking PA certification and is required for Elementary and Early Childhood Education certification. Prerequisite or Corequisite: ED 120 or permission of instructor.

ED 130 Adolescent Development 3 Fall & Spring S
Examines human physical, cognitive, and social-emotional development from preadolescence through young adulthood. Topics include identity, sexuality, gender issues, emotional and behavioral problems of adolescence, and the role of peers in adolescent development. Prerequisite: None.

ED 201 Educational Technology 3 Fall & Spring S
An introduction to educational technology and computer systems and their applications in the classroom. Topics to be covered include word processing/spread sheet/database; telecommunications; distance learning; audio/visual presentations; video production; web-page construction; classroom presentation software, adaptive use of computers; and software design and evaluation. Prerequisites: ED 110, ED 111, and ED 120, ED 121 or ED 130.

ED 240 Introduction to Students With Exceptionalities 3 Fall & Spring S
The purpose of this course is to introduce students to the culture of exceptionalities and the public special education system created to support individuals with exceptionalities and their families. Students will learn about the types of exceptionalities, identification and intervention procedures, relevant legislation and litigation, professional and community resources, inclusion, and other current issues. Prerequisites: ED 120, ED 121 or ED 130.

ED 299 Special Topics 1-3 Fall & Spring S
Provides students, particularly those not seeking certification, with experience organizing and communicating knowledge in their fields of study. This may be accomplished in public schools or other areas of social/community work, e.g., community health programs or family planning agencies. Note: titles may vary each semester; students may take each course for credit.

ED 300 Issues and Studies in Early Childhood Development 1 Fall & Spring S
A series of seminars on contemporary issues in child development, early education, and child care. Special emphasis is placed on current findings. Note: titles may vary each semester; students may take each Issues course for credit. Prerequisite: ED 120 and ED 121.

ED 310 Children's Literature 3 Fall & Spring S
An overview of the various genres of children's literature and the role of children's literature in promoting development in the young and school age child. Students will explore the use of children's literature as a vehicle for integrating the curriculum, evaluate different types of literature, and practice various storytelling techniques. They will develop an understanding of contemporary issues in children's literature, develop criteria, select literature that is developmentally appropriate for children; and carry out a literature project in an elementary classroom. Prerequisite: ED 110, ED 111, ED 120, and ED 121.

ED 320 Mathematics Methods 3 Fall & Spring S
An introduction to the content, teaching methodology, and assessment of mathematics concepts in the elementary school curriculum. Emphasis is placed on understanding connections among mathematical concepts and their application to problem solving situations. Students also engage in peer teaching and classroom observations. Prerequisites: ED 110, ED 111, ED 120, and ED 121.

ED 330 Language & Literacy I 3 Fall & Spring S CW
Emphasizes methodologies of teaching the language arts (listening, speaking, reading, writing, view-

ing, and visually representing); including special educational needs in language learning. Students participate in a tutoring program and gain experience in lesson planning. Prerequisites: ED 310 or permission of instructor.

ED 341 Adaptations for Students With Exceptionalities 4 **Fall & Spring** S CW

This course is intended for students pursuing teacher certification. Presents a variety of methods for teaching exceptional students, with an emphasis on inclusive classrooms. Demonstrates strategies for assessment; for teaching academic content, study skills, and social skills; for adapting curriculum and materials; for managing group and individual behavior in the classroom and self-management; and for collaboration with parents and professionals. Includes a practicum in the public schools or approved alternative setting working with students with disabilities. Prerequisites: ED 110, ED 111, and ED 240.

ED 342 Assessment and Instruction 3 **Fall** S

This course is designed to introduce students to the purposes, types, and uses of assessment for individuals with exceptionalities. Both formal and informal assessment tools will be presented. Students will learn about the critical linkage between assessment and instructional planning, the use of assessment data in eligibility, programming, and placement decisions, and considerations for ethical and effective assessment practices and interpretation procedures. Prerequisites: ED 120, ED 121, ED 130, and ED 240.

ED 350 Science Methods 3 **Fall & Spring** S CW

Discusses the content of science and teaching strategies appropriate to the various levels of elementary and middle school. After studying principles and teaching methods, students design a teaching module or outdoor education project and peer-teach a science topic. Prerequisites: ED 110, ED 111, and ED 120, ED 121, or ED 130.

ED 355 Social Studies Methods 3 **Fall** S

Focuses on current trends, materials, and teaching methods used in elementary social studies. Students review texts, select and organize content for units, practice appropriate teaching strategies, and learn to individualize instruction. Focus is placed on inquiry and on social studies as a thinking skills approach. Prerequisite: ED 330. Corequisite: ED 430W and permission.

ED 390 Practicum in Elementary Education 1-3 **Fall & Spring** S

A field experience in which students apply much of theory learned. This practicum is not the normal student teaching that is required for certification. Note: available by permission only.

ED 391 Practicum in Gifted Education 3 **Summer** S

A field internship designed for students interested in gaining experience in working with gifted children ages nine to 16 years. Interns live on campus, work as counselors for a group of children, assist master teachers with academic experiences and recreational experiences, organize daily activities for the residence halls, and participate in all orientation and exit activities of the New Visions or Voyages Summer Camps. Note: available by permission. Prerequisites: ED 120, ED 121 or ED 130, and ED 240 or permission from the instructor.

ED 392 Practicum in Secondary Education 1-3 **Fall & Spring** S

A field experience in which students apply theory they have learned in a middle or high school setting. This practicum is not the normal student teaching that is required for certification: Note: available by permission only.

ED 394 Practicum in Outdoor Education 1 **Fall & Spring** S

A unique hands-on, "outdoor classroom," residential, environmental education experience at Shaver's Creek. Students must commit 24 hours a day for five days to participate in training; supervise children; teach lessons in natural history, ecology, and cultural history; lead group problem solving activities; and provide a positive role model for children. Students must obtain permission from professors and make-up all work before their week at Shaver's Creek. Prerequisite: ED 110, ED 111, ED 120 and ED 121.

ED 395 Practicum in Early Childhood Education 1-3 **Fall & Spring** S

A field experience designed for students seeking early childhood certification. This course is especially desirable for students who have done or will do practicums at the elementary level. Prerequisites: ED 120 and ED 121.

ED 398 Methods for Foreign Language Education 4 Fall S CW,CS

This course is for students interested in teaching foreign languages or English as a foreign or second language (ESL). This course provides a thorough introduction to contemporary theories and methods of language pedagogy. Students seeking K-12 certification in foreign languages may take this course instead of ED 420 after completing study abroad. It may also be taken by those students who have an interest in teaching English abroad. International students who are here for a semester or a year should also consider taking this course.

ED 399 Special Topics 1-3 Fall & Spring S

A more advanced version of the 299 Special Topics course. See ED 299 for a description. Note: titles vary each semester; students may take each Special Topics course for credit.

ED 400 Curriculum & Methods in Early Childhood Education 4 Fall S CW,CS

Emphasizes curriculum models, theory, methods, and materials in early education. The focus is on play and its relationship to development. Theory is translated into practice with consideration given to the developmental needs and interests of toddlers and preschoolers, skill acquisition, content selection, teacher roles, and interpersonal communication skills. Students apply skills in a practicum experience at the Early Childhood Education Center. Prerequisites: ED 110, ED 111, ED 120, and ED 121.

ED 410 Families and Teachers in Early Childhood 3 Spring S CW,CS

For students preparing to teach or work with children, particularly at the early childhood and elementary levels. Major emphasis is on developing interpersonal skills to enhance relationships and communication among teachers, students and parents. Home visits, case studies, and parent workshops are major activities. Note: Practicum required

ED 420 Secondary Methods 4 Spring S CW

Requires the application and practice of skills in content area reading and writing, planning for instruction, development of curriculum, evaluation and assessment of learning, and micro teaching. Students are required to complete a practicum in preparation for student teaching. Prerequisites: ED 341 and permission to enter. Note: Students must have access to reliable transportation.

ED 430 Language and Literacy II 4 Fall S CW

Three themes are woven through the course: Helping students develop as strategic readers and writers; organizing and managing the classroom and curriculum for literacy instruction and assessing students' literacy development. Students will complete a practicum, and should have access to a car. Prerequisites: ED 310 and ED 330 and permission. Corequisite: ED 355.

ED 440 Methods for Students with High Incidence Disabilities 3 Spring S

This course will focus on studies in classroom and instructional management for students with high incidence disabilities, specifically, learning disabilities, speech or language impairments, mild mental retardation, and emotional disturbances and behavior disorders. Prerequisite: ED 341.

ED 441 Methods for Students with Low Incidence Disabilities 4 Spring S

This course will focus on studies in classroom and instructional management for students with low incidence disabilities, specifically, severe cognitive needs, low vision and blindness, hearing impairments and deafness, deaf-blindness, autism, physical or health disabilities, and traumatic brain injury. Successful completion of a practicum experience in an educational setting is also a requirement for this course. Prerequisite: ED 341.

ED 450 Student Teaching 14 Fall & Spring S

The capstone experience for students preparing for certification to teach in a preschool, elementary, middle, or secondary schools. Students synthesize and apply knowledge of developmental theory, content, and teaching methodology as they design, implement, and evaluate learning experiences in an intensive internship in the classroom. Prerequisites: Students must complete all requirements specified in the Education Department handbooks. Prerequisites: All certification requirements and

permission. Corequisite: ED 451. Note: A special fee is assessed. Students must have access to reliable transportation.

ED 451 Student Teaching Seminar 1 **Fall & Spring** S

In conjunction with student teaching, students attend weekly seminars that are led by the college supervisors. These meetings focus on professional topics and allow students to reflect upon and share student teaching experiences. In addition, students develop and practice interviewing techniques, become familiar with employment seeking strategies, and develop a portfolio that includes but is not limited to a philosophy of education statement, an expanded vita, lesson plans, and documentation of professional experiences. Corequisite: ED 450.

ED 452 Student Teaching for Dual Majors 6 **Summer** S

The pupose of the course is to provide an additional student teaching experience for individuals who are seeking certification in more than one certification area. Prerequisite: Students must have successfully completed all requirements including student teaching in another certification area or hold Pennsylvania certification in another area. Note: A special fee is assessed. Students must have access to reliable transportation.

ENGLISH, COMMUNICATION, & THEATRE ARTS (EN, CM, TH)

	Office
Assistant Professor Belser	HUM 105
Associate Professor Fala	QH 102
Associate Professor Goldstein	QH 101
Professor Hochberg	HUM 107
Associate Professor Katz	QH 203
Instructor Laskowski	QH 103
Instructor Parvin	QH 202
Professor Weimer (Chair)	QH 100

Background Information:

The Department of English, Communications, and Theatre Arts offers a diversity of educational experiences in language, literature and communication. Fundamentally, the department aims to teach students to think clearly and creatively, to write and speak persuasively, to read with intelligence and imagination, and to gain insight into audiences. Such skills and knowledge will enable students to pursue not only a wide variety of exciting career paths but graduate study as well.

Special programs, facilities, or equipment:

- Bailey Oratorical Program
- Soap Box Speeches
- Communications Club – SPEAK
- Conflict Mediation with The Baker Institute Mediation Services
- Unlock Your Voice
- Lift Ev'ry Voice

Programs of Emphasis:

- English
- English/Secondary Education
- Communication
- Communication/Secondary Education

Student Designed Programs of Emphasis:

- History and English
- Environmental Policy/English
- Media Studies
- Political Communication
- Communications/Criminal Justice

Secondary Emphasis:

- Requirements: At least 18 credits of courses in respective emphasis.

Internship/Research Experiences:

- White House, Washington, DC
- Federal Drug Investigation Commission
- Pittsburgh Zoo: Public Relations

ENGLISH (EN)

EN 110 College Writing Seminar 5 **Fall & Spring**
This first-year course integrates critical reading and writing skills, information access and extended orientation. It introduces students to the diverse modes of thought and communication that characterize the college experience. Individual conferences, peer reading, revision of writing, and portfolio assessment are some of the essential elements in this integrated and process-oriented approach to college work. Note: This course does not satisfy distribution requirement.

EN 120 Forms of Literature 3 **Fall or Spring** **H**
An introduction to the study of literary forms, including poetry, drama, short story, novel, and essay. Students will read texts from a wide variety of genres and historical periods, and learn the vocabulary and technique of literary analysis.

EN 155 The Short Story 3 **Fall or Spring** **H**
An examination of the modern short story from its development in the mid-19th century to its variety today in such writers as Borges, Barthelme, and Oates.

EN 162 Women and Literature 3 **Fall** **H**
Studies literature by and about women; looks at the rich history of women's literature and the variety of traditional and non-traditional approaches women have used to describe their experience, from poetry, stories, and novels to letters and memoirs; explores the effects of culture on women's writing.

EN 163 Science Fiction 3 **Fall or Spring** **H**
Science fiction—the attempt to make sense of this world by creating others—is the quintessential literary genre of the 21th century. This course studies the history and scope of modern science fiction, from aliens to post-nuclear societies, from time travel to advanced technology.

EN 170 World Literatures 3 **Spring** **HI**
Studies literature written from a multicultural perspective; emphasizes writing by African, African American, Asian, and Asian American authors. Looks at the historical and cultural contexts that have influenced these writers and their works.

EN 200 History of the Language 3 **Fall or Spring** **HI**
A study of the origin, growth, and structure of the English language and its historical evolution from Indo-European. This course focuses on phonology, morphology, syntax, language acquisition, the social dimensions of language, and English around the world. Prerequisite: EN 110.

EN 242 Major American Writers I 3 **Fall** **H**
A study of the major American writers of the 18th and 19th centuries, such as Emerson, Thoreau, Poe, Hawthorne, Melville, Whitman, Dickinson, Twain, and James. Focuses on the intellectual and aesthetic values of the writers in their cultural milieu. Prerequisite: EN 110

EN 243 Major American Writers II 3 **Spring** **H**
A concentration in 20th century literature, including the work of such writers as Frost, Eliot, Fitzgerald, Hemingway, Faulkner, and O'Connor. Emphasizes the intellectual, moral, and aesthetic values of the age. Prerequisite: EN 110

EN 244 British Literature to 1600 3 **Odd Years** **H**
Fall or Spring **CW**
Studies major works of the Old and Middle English periods and the Renaissance, including Beowulf, the Canterbury Tales, the Mystery and Morality plays, and various accounts of King Arthur, Gawain, and other heroic characters; with some emphasis on the social and historical contexts in which these works were created. Prerequisite: EN 110

EN 245 British Literature, 1600-1800 3 **Odd Years** **H**
Fall or Spring **CW**
Studies some of the most vibrant eras of British Literature: from the experimentation of the Jacobean period to the upheavals of the Civil Wars, from the alternately stern and bawdy Restoration to the cool yet troubled Neoclassical period. Looks at authors both "major" and "minor" with some emphasis on the social and historical background of the times. Prerequisite: EN 110

EN 246 19th Century British Literature 3 Even Years H
Spring CW

An examination of English literature from the beginnings of Romanticism to early modern times. Analyzes the intellectual, social, and aesthetic values in the works of writers such as Blake, Bronte, Wordsworth, Dickens, Browning, Ruskin, and Yeats. Prerequisite: EN 110

EN 300 Modern Theories of Grammar 3 Odd Years H
Spring CW

An analysis of grammatical theory and the grammatical features of English from a variety of perspectives. Includes units on language acquisition, sociolinguistics, and language and the brain. The course involves research techniques, informational gathering, and field work. Note: this is not a remedial course in English grammar. Prerequisite: EN 110.

EN 303 Poetry Writing 3 Even Years FH
Fall or Spring

An intensive workshop in poetic techniques and extensive writing of poetry for class discussions and criticism.

EN 305 Fiction Writing 3 Odd Years FH
Fall or Spring CW

Concentrates on the techniques of fiction, extensive writing of fiction, and the development of creative and critical approaches to fiction. Prerequisite: EN 155.

EN 306 Essay Writing 3 Even Years H
Fall or Spring CW

An experience in creating forms of non-fiction prose ranging from analytical essay to the familiar essay. Prerequisite: EN 110.

EN 311 Professional News & Feature Writing 3 Odd Years H
Fall or Spring CW

An advanced writing course that introduces students to the genres and techniques of writing basic newspaper stories as well as news and magazine feature stories. The writing process involves interviewing, note taking and other forms of data gathering on campus and local news events, creating multiple story drafts and participating in peer-editing workshops; work culminates in a portfolio of stories written throughout the semester. Students need not plan to become professional media writers to benefit from the course. Prerequisite: EN 110.

EN 315 Technical Writing 3 Fall H
CW

An examination of writing for the real world: as such it concentrates equally on content and practice. The course builds around various document designs and ways to present those designs in expressions appropriate to audience and purpose. Prerequisite: EN 110.

EN 341 Shakespearean Drama 3 Spring H
Examines the historical, literary and theatrical dimensions of Shakespeare's comedies, history plays, and tragedies. Prerequisite: EN 110.

EN 360 Myth & Literature 3 Odd Years HI
Fall or Spring

A study of the way myth shapes human perceptions of reality and informs literature and film. Various theoretical approaches to the study of myth and folklore – literary, Jungian, feminist, for example – will be considered. Prerequisite: EN 110.

EN 361 Modern Drama 3 Odd Years FH
Spring CW

A survey of the English dramatic tradition, from the late nineteenth century to mid-twentieth century. Primarily a script reading course, the focus is on dramatic literature, dramatic movements, and critical works. Prerequisite: EN 110.

EN 369 The Novel to World War II 3 Odd Years H
Fall or Spring CW

A critical study of selected British and American novels of the 19th and early 20th centuries, with attention to forms, themes, and historical and cultural contexts. Prerequisite: EN 110.

EN 370 The Contemporary Novel 3 **Even Years** H
Fall or Spring CW

The novel in English during the last 40 years. Focuses on works by writers such as Erdrich, Morrison, Winterson, and Wright. Prerequisite: EN 110.

EN 372 Contemporary Poetry 3 **Even Years** H
Fall or Spring

A study of representative British and American poets published since 1945; different poets are discussed each time the course is taught. Some emphasis on the relationship of the poets to the social and political context of their times. Prerequisite: EN 110.

EN 399 Special Topics 3 **Fall or Spring** H

Offers special studies to meet the interests and demands of students. Examples include "The Victorian Temper," and "Hawthorne and Melville." Note: abbreviated ST: (title); students may take each ST: course for credit.

EN 410 Literary Theory 3 **Odd Years** H
Fall or Spring CW

This course will examine various theoretical approaches to literature which have come to prominence over the last 25 years. Movements such as Structuralism, Deconstruction, Hermeneutics, Reader Response and Speech Act Theory, Feminism, Marxism, Freudianism, and the New Historicism and Pragmatism will be studied from the perspectives of both their philosophical foundations and their application to the practical criticism of texts. Prerequisites: EN 110 and two of the following: EN 155, EN 170, EN 242, EN 243, EN 244, EN 245, EN 246.

COMMUNICATION (CM)

THE COMMUNICATION CORE
CM 130 Introduction to Human Communication
CM 132 Message Analysis
CM 133 Mass Media and Society

CM 001 Non-Credit Communication Internship **Summer**

An opportunity to gain transcript recognition for summer employment in the communication field. Employment must be at least 9 weeks long. Arrangement must be made with Internship Director in advance of employment. Note: See the chapter "Special Programs" under Internships; listed as Internship: (title). Prerequisite: permission.

CM 130 Introduction to Human Communication 3 **Fall or Spring** H
CS

Surveys the fundamental tenets of human communication through application. This course is concerned with how and why we speak, listen, respond, and strategize through the uses of verbal and nonverbal symbol systems.

CM 132 Message Analysis 3 **Fall or Spring** H

Surveys prominent theories in the field of persuasion. It is organized topically with an emphasis on connections to social science research in communication. Contemporary scholars are used to analyze rhetorical events as they give shape to our private and public lives.

CM 133 Mass Media and Society 3 **Fall or Spring** H

An examination of the mass media (print, radio, television, web, and film) which serve our most common interests. The focus is on the four primary functions of communication: information, entertainment, persuasion, and transmission of culture.

CM 200 The Art of Public Speaking 3 **Fall or Spring** H
CW, CS

Seeks to develop and improve fundamental principles and methods of selecting, organizing, developing, and communicating a line of reasoning and evidence for constructive influence in speaking situations. Students will make three formal presentations, will analyze messages, and will participate in group problem solving. (sophomore standing)

CM 220 Group Communication 3 **Fall or Spring** H CW, CS

A performance course designed to improve communication with others in a small group problem-solving situation. The outcome is three group presentations. Emphasis is placed on developing alternative communication strategies for group decision making, for leadership, and for managing interpersonal conflict. Prerequisite: CM 200.

CM 230 Interpersonal Communication 3 **Fall & Spring** H CW, CS

Introduces students to the various theories and styles of one-on-one communication. It emphasizes the transactional approach to studying the communication process as it occurs in interpersonal relationships. It explores interaction as a way by which we come to know ourselves and each other.

CM 289 Communication Practicum 2 **Fall & Spring** FH

A practicum in Communication encourages students to: (1) develop skills in analyzing and delivering public presentation; (2) assess, interpret and analyze demographic data among diverse audiences; (3) understand speech communication in a variety of contexts; (4) appreciate public address from historic perspectives; and (5) participate actively in the speech communication field. Note: available by permission only.

CM 300 Advanced Public Speaking 3 **Odd Years** H
Fall or Spring CW, CS

Designed for students to improve and polish their speaking skills for effective presentations in professional settings. It is a performance course with emphasis placed on structure, audience adaptation, style of presentation (oral report and manuscript reading), and use of PowerPoint. Videotaping is used to help speakers understand the relationship between their behaviors and responses of listeners. Prerequisite: CM 200 or CM 220.

CM 330 Media Analysis 3 **Fall or Spring** H CW

An intensive study exploring analytical approaches to a variety of media, including advertising, television sitcoms, news shows, propaganda, film, music, and architecture, in order to ascertain the persuasive messages inherent in each genre. By examining the rhetorical choices made by the artist or writer concerning material, audience, and present, we can better understand the intentions of the medium and, in a larger sense, the cultural values that shape the medium. Prerequisites: EN 110, CM 132 or CM 133.

CM 340 Intercultural Communication 3 **Fall or Spring** HI CW

Examines symbolic patterns of communication as they relate to issues of diversity. Interactive skills needed to open channels of communication between and among people of diverse backgrounds will be analyzed and developed. A multicultural approach to the study of human communication will serve as a basis for exploring issues of diversity that include but are not limited to race, gender, class, ability, sexual orientation, religion and ethnicity. Prerequisite: CM 230.

CM 350 Studies in Rhetoric 3 **Fall or Spring** H CW

This course examines persuasion both in its theory and criticism. It focuses on theories of rhetoric that have influenced our modern understanding of communication. Areas of application such as public address, communication technologies, politics, and mass media will form the emphasis. Depending on the emphasis the subtitle will change after the title Studies in Rhetoric. Students may take each course for credit. Prerequisites are CM 132 and CM 133.

CM 360 Studies in Communication 3 **Variable** H

Aims to develop awareness and appreciation of various styles and theories of human communication relevant to particular applied areas. The course subtitle will change as different applications are explored. Examples include the study of human communication as applied in: Intercultural Communication; Health Communication; Gender Communication; Environmental Communication; and Organizational Communication. Students may take each course for credit. Prerequisites: CM 130 and CM 230.

CM 490 Communication Internship 2-9 **Fall & Spring** H

Communication students may apply their acquired skills and knowledge in on-the-job internships for a semester during their junior or senior year for a total of 9 credit hours. Television stations, radio

stations, newspapers, magazines, public relations, and advertising agencies are all possible placements for the Juniata interns, who not only work as full-time members of the business team, but also evaluate and document their growth in a journal and prepare a portfolio of presentations or publications. Corequisite: CM 495. Prerequisite: Communication Core.

CM 495 Communication Internship Research 2-6 **Fall & Spring** **H**
In addition to the on-the-job experience provided by the internship, students are required to pursue research related to their placement. Corequisite: CM 490. Prerequisite: Communication Core.

THEATRE ARTS (TH)

TH 105 Introduction to Theatre 4 **Fall or Spring** **FH CW**
An introduction to the theatre experience. Areas of inquiry include: role of the audience; purpose of the theatrical event; dramatic literature and structure; the role of the playwright, actor, producer, director and designers; includes hands-on experience.

TH 180, 280, 380, 480 Theatre Arts Practicum 1-3 **Fall & Spring** **FH**
Credit option for students participating in theatrical productions. Students may receive credit for acting, technical, or administrative positions for a given production. Credit hours dependent upon role or position; credit limits will be determined by supervisor. Note: available by permission only.

TH 221 Acting 3 **Fall or Spring** **FH CS**
A study of the discipline of acting, including development of concentration methods, creative energy, fine tuning of the vocal and physical instrument, movement styles and character and script analysis.

ENVIRONMENTAL SCIENCE AND STUDIES (ESS)

Core faculty	*Office*
Associate Professor Martin (Chair)	BSC/P224
Assistant Professor Johnson	BSC/P108
Lecturer Chuck Yohn *(Director, Raystown Field Station)*	BSC/B211
Supporting faculty in other departments	
Associate Professor C. Cook-Huffman *(Peace & Conflict Studies)*	QH 103
Professor Demarest *(Biology)*	BSC/B231
Professor T. Fisher *(Chemistry)*	BSC/C203
Professor Glazier *(Biology)*	BSC/B229
Professor Gustafson *(Biology)*	BSC/B303
Assistant Professor Hague *(Politics)*	Good 317
Associate Professor Hsiung *(History)*	IHB 100
Professor Lakso *(Economics)*	FND 224
Assistant Professor Matter *(Biology)*	BSC/B217
Professor Mitchell *(Chemistry)*	BSC/C221
Professor Murray *(Peace & Conflict Studies)*	QH 201
Professor Mutti *(Geology)*	BSC/P104
Assistant Professor Nagengast *(Politics)*	Good 316
Professor Ochiai *(Chemistry)*	BSC/C206
Professor Reed *(Chemistry)*	BSC/C207
Professor Schettler *(Chemistry)*	BSC/C223
Assistant Professor Siegel *(Fine Arts)*	Carnegie Building
J. Omar Good Visiting Professor Towne	IHB 201
Professor Thurston-Griswald *(Spanish)*	Humanities 208
Professor Washburn *(Geology)*	BSC/P110
Assistant Professor Wagoner *(Anthropology)*	Good 410

Background Information:

The Environmental Sciences and Studies department is poised to train the leaders to affect positive environmental change in the new millennium. Environmental science is the scientific study of the relationship between humans and the environment. Environmental studies focuses on the relationship of humans and the environment, but from the social science and humanities prospective. Students must also take a variety of classes outside of Environmental Science and Studies to gain depth in their particular focal areas.

Special programs, facilities, or equipment:

- The Raystown Environmental Studies Field Station: 665 acres of land available for college use, provides students with hands-on environmental research and education
- Water Analysis Laboratory: Run by students, the lab collects samples and performs analysis for local municipalities
- Geographic Information Systems (GIS) computer lab

Programs of Emphasis:

- Environmental Science
- Environmental Studies

Student Designed Programs of Emphasis:

- Environmental Policy
- Environmental Biology
- Environmental Geology

Internship/Research Experiences:

- Denali National Park, Alaska
- Dept. Fish and Wildlife, Oregon
- Department of Environmental Protection, PA
- Game Commission, PA
- Regional Math/Science Center, Frostburg State University, MD

ESS Departmental Courses:

ESS 200 Introduction to Environmental Science and Studies 4 Fall N
This course introduces the student to ecological systems and human systems that impact the environment. The course explores the two forces that are at the core of environmental impacts: exponential growth of human population and exponential growth in human consumption of energy and materials. The major impacts (climate change, ozone depletion, air and water pollution, loss of biodiversity) will be explored as will the fundamental attributes of agriculture, food, soil and water. The fourth, hour of the course will be devoted to quantitative analysis of environmental issues. Throughout, the influence of culture, society, ethics and science on environmental problems will be discussed. Prerequisites: 2 science courses (one can be taken concurrently with ESS200).

ESS 205 Introductory Laboratory for ESS 1 Spring NS
A laboratory course to describe connections between and within human and natural systems. Geographic Information Systems (GIS) will be the primary tool used to illustrate the systems connections. Prerequisite: ESS200.

ESS 289 Environmental Science and Studies Seminar 1 Spring NS
A weekly seminar series, suggested for all ESS POEs in their sophomore year, consisting of seminars given by invited speakers (academic researchers, environmental consultants, environmental NGOs and government agencies representatives) and Juniata faculty. The course will include presentations describing independent research, internships and study abroad opportunities, and reports from students and faculty in these programs. Readings from a wide-variety of ESS primary literature (journals and grey literature) will also be presented and discussed. The course is designed for students to explore the variety of potential ESS paths available to them. Grading will be S (satisfactory) or U (Unsatisfactory). Prerequisite: ESS200.

ESS 300 Environmental Problem Solving 4 Fall NS CW
Environmental issues require a diverse knowledge and skill base to correct the problem, therefore teamwork with people with diverse skill bases are needed. This course is designed for students to work in teams to address a particular environmental concern in the local community. Practice and experience in solving actual environmental issues, putting to work theory and academic knowledge while gaining experience in an interdisciplinary team (including both environmental scientist and environmental studies students) and creating an useful end-product will be the objectives of this course. ESS 300 will also act as preparation for senior research and internships offered first in Fall 2001. Prerequisites: ESS200.

ESS 320 Environmental Monitoring 4 Spring N
This course explores environmental monitoring by reading and discussing cases. Cases will cover air, water, land, waste, health, and sustainability. Students will learn the details of site assessment. In the laboratory students will learn specific monitoring skills. Prerequisite: ESS200 or permission. A course in statistics and ecology is highly recommended.

ESS 350 Field Research Methods	4	Spring	N CW

Field Research Methods is intended for students interested in gaining experience in conducting field based ecological or environmental research. Students will be led through the process of investigation, including the generation of research questions, research planning and design, analysis of data, and presentation methods, while giving them the opportunity to conduct independent projects. The course will fulfill the independent study requirement of the ESS POE and be particularly useful to students considering a field-based senior research project. Prerequisites: ESS 200 or permission of instructor; a course in statistics or ecology is highly recommended.

ESS 399 Special Topics	4	Variable	N

Topics vary from year to year. They will focus on one or more special environmental skills, methods, approaches or technologies. A laboratory fee will be assessed.

ESS 450 Environmental Research	2-6	Fall & Spring	N,S CW

An independent research experience that includes the preparation of a research proposal. Students present research results during weekly meetings with instructor. A research paper is the endpoint of the research experience. Presentation of results at national meetings is encouraged. May be repeated for up to 15 credits. Prerequisite: ESS300 and permission of instructor.

ESS 490 Environmental Science and Studies Internship	2-9	Fall & Spring	N

Note: may be repeated up to a total of 9 hours of credit. Corequisite: ESS495. Prerequisite: permission.

ESS 495 Internship Seminar	2-6	Fall & Spring	N

Requires student to reflect on internship experience. Corequisite: ESS490. Prerequisite: permission.

Other ESS-Related Courses:

AR 120 The Art of Environmentalism	3	Fall	F
BI 300 General Ecology	3	Spring	N CW
BI 301 General Ecology Laboratory	3	Spring	N
BI 325 Plant Ecology & Systematics	2	Fall	N
BI 326 Plant Ecology & Systematics Laboratory	2	Fall	N
BI 328 Limnology	3	Spring	N
BI 329 Limnology Laboratory	1	Spring	N
BI 432 Environmental Toxicology	3	Fall	N CW
CH 220 Analytical Chemistry	5	Spring	N
EB 305 Economics and the Environment	3	Alternate Years	S
GL 100 Introduction to Geology	3	Fall & Spring	N
GL 101 Introduction to Geology Laboratory	3	Fall & Spring	N
GL 111 Oceanography	3	Fall & Spring	N
GL 112 Weather and Climate	3	Even Years Spring	N
GL 213 Mineral Economics, Politics & Law	3	Alternate Years Fall & Spring	I CW
GL 220 Geochemistry of Natural Water	3	Odd Years Fall	N
GL 305 Hydrogeology	3	Odd Years	N
HS 262 North American Environmental History	3	Spring	H CW
MA 303 Introduction to Mathematical Modeling	3	Fall	N QM
PACS 105 Introduction to Conflict Resolution	3	Fall	S

GEOLOGY (GL)

	Office
Assistant Professor Lehman	BSC/P100
Professor Mutti (Chair)	BSC/P104
Professor Washburn	BSC/P110

Background Information:

Geology is the science that explores the history and physical behavior of the earth. Juniata's geology department is designed to prepare students for direct entry into the work force in environmental consulting or for further study at the graduate level. Students of geology explore earth processes as diverse as volcanism, flooding, shoreline erosion, organic evolution, groundwater, mountain building, glaciation and earthquakes.

Special programs, facilities, or equipment:

- The Raystown Environmental Studies Field Station, 665 acres of land available for college use.
- Field observation of the unparalleled geological and paleontological landscape of the Valley and Ridge province of central Pennsylvania
- Extended field trips where important geologic features or processes cannot be readily investigated close to campus.
- Summer field camp experience, 6-8 weeks, ordinarily in Western U.S.
- Map reading and detailed laboratory investigations
- Excellent collection of mineral, fossil, and rock specimens
- Petrographic microscopes
- Automated x-ray diffractometer

Programs of Emphasis:

- Geology
- Earth and Space Science/Secondary Education

Student Designed Programs of Emphasis:

- Geology and Ecology
- Geology and Environmental Science
- Geology and History

Secondary Emphasis:

- Requirements: 22 credits in geology, those credits having been selected in consultation with a geology professor as one of the student's advisers.

Internship/Research Experiences:

- Research carried out on the central Appalachians during the mid-Paleozic period.
- Studies and research done in the Devil's Hollow member of the Lexington Limestone, northern Kentucky
- Field and Laboratory research performed in the Buck Creek Ultramafic Complex of North Carolina.

General Earth and Environmental Science

GL 100 Introduction to Geology 3 **Fall & Spring** N
An introduction to the principles and methods of geology. Emphasis is placed on the geologic forces at work in our physical environment. Topics covered include internal processes such as volcanism, earthquakes, and mountain building as well as external processes such as landslides, flooding, erosion, and landscape formation. Emphasis is given to the interaction of human activities on these physical processes as well as the processes themselves.

GL 101 Introductory Geology Laboratory 1 **Fall & Spring** N
Gives students the opportunity to do geology in the laboratory and field. Concepts and methods covered in the lecture are reinforced. Specifically covered are mineral and rock identification, map interpretation and study of examples of earth processes from map and in the field. Note: some field trips are required and a special fee is assessed. Corequisite: GL 100.

GL 111 Oceanography 3 **Fall or Spring** N
A survey of the physical, chemical, biological, and geological environments of the ocean. Included are sea floor topography, composition, and circulation of sea water and the life existing in the oceanic environments.

GL 112 Weather & Climate 3 **Even Years Spring** N
An introductory study of the elements of weather, weather systems, and the physical bases for climate. Problems of air pollution and climactic changes are presented.

GL 213 Mineral Economics, Politics & Law 3 **Alternate Years Fall or Spring** I CW
Introduces mineral deposits and examines their distribution and exploitation. Explores historical patterns in mineral resource utilization and considers the extractive industries in the context of economic patterns and government policies. Emphasizes the potential for conflict resulting from the uneven distribution and exploitation of mineral wealth. (A Peace and Conflict Studies course). Note: this course does not fulfill the distribution requirement in science. (A CAII Course)

Professional Courses in Geology and Environmental Science

GL 100 Introduction to Geology 3 **Fall and Spring** N
(see above)

GL 200 Introduction to Field Methods 3 **Summer** N
Presents the basic techniques of geologic mapping. Students measure stratigraphic sections, collect geologic data and construct maps in the field. Pace and compass, topographic and aerial photo base maps are used. Note: summer only; eight hours per day in the field; five to six days per week for three weeks. Prerequisite: GL 202.

GL 202 Historical Geology 3 **Spring** N
Reviews the geologic history of North America. Stress is on the principles and methods of interpreting geologic history. The physical development of continents, mountain chains, and ocean basins is discussed as well as the evolution of life. Corequisite: GL 203. Prerequisite: GL 100.

GL 203 Historical Geology Laboratory 1 **Spring** N
An introduction to the methods of interpreting geologic history. Some of the topics covered are stratigraphic principles, sedimentary rock associations, correlation of strata, fossils, and geologic map interpretation. Note: some field trips are required and a special fee is assessed. Corequisite: GL 202. Prerequisite: GL 101.

GL 205 Paleobiology and Paleoecology of Invertebrates 4 **Fall** N
Basic principles of paleontology and functional morphology of extant and extinct invertebrates are covered. Basic principles include interpreting preservation of organisms in order to interpret ancient physical and chemical environment parameters and understanding how evolutionary changes impact faunal diversity and ecology. Functional morphology of bacteria, algae, protists, micro- and macroinvertebrates are examined. Note: one laboratory per week; some field trips are required including a Thursday-Sunday trip. A lab fee is assessed. Prerequisite: GL 202 or BI 113.

GL 210 Mineralogy 4 Fall N

Emphasizes the recognition of minerals in hand-specimens and by X-ray diffraction analysis. The understanding of their classification, crystal structure, chemical compositions, physical properties, and stability relations are stressed. Note: one laboratory per week. A lab fee is assessed. Prerequisite: one semester of chemistry.

GL 220 Geochemistry of Natural Water 4 Odd Years Fall N

Emphasizes water-rock interaction to account for soil mineralogy and water chemistry, using mathematical and graphical approaches to describe equilibrium. Attention is given to chemical buffering, the movement of contaminants, the impact of human activity, and the evolution of water chemistry through prolonged contact with rocks or evaporation. Note: one laboratory per week. A lab fee is assessed. Prerequisites: GL 100, GL 101, and one year of chemistry including lab.

GL 300 Petrography 4 Spring N

The petrographic examination of rocks in hand specimen and under the microscope. Identification of the principal types of igneous and metamorphic rocks and discussion of their chemical and mineralogical characteristics and classification is emphasized. Note: one laboratory per week, a major field trip is required, and a special fee is assessed. Prerequisite: GL 210.

GL 301 Petrology of Igneous & Metamorphic Rocks 4 Spring N CW

Analyzes the process of magma generation and crystallization under equilibrium and disequilibrium conditions in the context of igneous phase equilibria and geologic setting. The recrystallization of pre-existing mineral assemblages in the metamorphic environments and the understanding of metamorphic conditions by interpretation of facies assemblages and petrogenetic grids are stressed. Note: one laboratory per week, a major field trip is required, and a special fee is assessed. Prerequisite: GL 300.

GL 305 Hydrogeology 3 Odd Years Spring N

The study of the natural occurrence of water. Topics include: the hydrologic cycle, precipitation, stream flow, soil moisture, groundwater occurrence, aquifer flow and testing, chemical characteristics, contamination, development and management of groundwater resources. Note: one or two field trips. Prerequisites: GL 100, 101, 202 and 203; one year of chemistry; MA 130.

GL 310 Structural Geology 4 Fall N

The study of the deformation of the earth's crust. Field relationships, form, symmetry, and geometry of earth structures are stressed. Concepts of kinematic and dynamic analysis are presented so students are better prepared to interpret the origin of rock structures. Note: one laboratory per week, one five-day field trip is required, and a special fee is assessed. Prerequisite: GL 202.

GL 315 Principles of Stratigraphy 4 Spring N CW

Includes the description of sedimentary rocks in the stratigraphic column, methods of correlation, interpretation of the origin of rock units, and the historical and philosophical development of the geologic time scale. Note: one laboratory per week, field trips are required, and a special fee is assessed. Prerequisite: GL 202.

GL 399 Special Topics 1-3 Fall or Spring N

An examination of an area of study not regularly included in the departmental offerings. Examples have been Geomorphology, Petroleum Geology, Case Studies in Environmental Geology. Note: abbreviate ST: (title); students may take each ST: course for credit.

GL 401 Sedimentology 4 Fall N

Focuses on the origin of sediments and sedimentary rocks. Included are sedimentary processes, depositional environments, post-depositional influences, and sedimentary rock classification. Principles and methods of study including petrographic analysis are emphasized. Note: one laboratory per week, field trips are required, including a weekend trip, and a special fee is assessed. Prerequisites: GL 205, GL 300 and one year of college chemistry.

GL 450 Geological Research 1-4 Fall or Spring N CW

The field or laboratory investigation of a specific geologic problem. Methodology and principles of interpretation are necessary for the successful completion of the course and a final report must be

submitted. Note: listed as Research: (title); may be taken multiple times for credit. Prerequisite: permission.

GL 490 Geology Internship 2-9 **Fall & Spring** **N**
(see the chapter, Special Programs under Internships.)

GL 495 Internship Research/Seminar 2-6 **Fall & Spring** **N**
Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: GL 490. Prerequisite: permission.

HISTORY (HS)

	Office
Assistant Professor Atwill	IHB 200
Associate Professor Hsiung (Long Professor) (Chair)	IHB 100
Professor Kipphan (Dana Professor)	IHB 103
Professor Nieto	IHB 102
Associate Professor Sowell	IHB 202
Assistant Professor B. Tuten	IHB 203

Background Information:

The department offers a core of survey courses and supplies this base with other studies emphasizing the social, economic, political, and cultural aspects of the past with strength in European, Latin American, Islamic, Asian and U.S. studies. The department provides sound preparation for a wide variety of vocational interests, including those of historian, teacher, and lawyer, as well as those in business and government. In addition to traditional survey courses, the department offers selected in-depth studies (e.g., seminars on the holocaust, filming the Dark Ages, and local history).

Special programs, facilities, or equipment:

- *National History Day:* Since the early 1980's the Department has organized and run the annual regional competition for National History Day. As many as 500 middle and high school students have participated in a single year's competition.
- *Skulldiggers:* This Club for students interested in history is officially chartered with Student Government and has engaged in a number of activities including: field trips, hosting speakers and bringing order to the archival material in the Juniata College museum.

Programs of Emphasis:

- History
- Secondary Education/Social Studies
- History/Art History

Student Designed Programs of Emphasis:

- Elementary Education/History
- History and English
- Arts and Museum Studies/History
- History and Geology
- History and Politics
- History and Biology

Secondary Emphasis:

- Requirements: six courses for a total of at least 18 credits; two at the 300-level or above; at least one in a non-western field.

Internship/Research Experiences:

- Local Attorneys
- National Park Service
- B&O Railroad Museum
- National Gallery
- Huntingdon County Historical Society
- Local Archeologist

HS 101 American Mysteries: The Historian as Detective 3 **Fall or Spring** H CW

Mysteries abound in the history of the United States. For example, what explains accusations of witchcraft or a murderer's motives? As students try to solve such mysteries, they will work with a variety of historical materials and come to understand better the larger context of American history and how historians think. Open to first-year students or by permission of instructor.

HS 102 Ancient Judeo-Christian Heritage 3 **Fall** H CW

The critical study of the Judeo-Christian tradition in terms of its history, religion, literature, and contribution to Western culture.

HS 104 The Middle Ages: 500 to 1300 A.D. 3 **Fall** H

Focuses on the intellectual, political, social, and economic changes in Europe from the fall of the Roman Empire through the High Middle Ages.

HS 105 Modern Europe to 1815 3 **Fall** HI

An introduction to the chief historical changes from the Late Middle Ages through the fall of Napoleon, with special emphasis on political, religious, economic, and intellectual developments.

HS 106 Modern Europe since 1815 3 **Spring** HI

An introduction to modern European history from the post-Napoleonic era through the reconstruction after World War II.

HS 115 The United States to 1877 3 **Fall** H

This course examines U.S. history from its colonial beginnings through Reconstruction using a variety of sources and following the themes of freedom and power.

HS 116 The United States since 1877 3 **Spring** H

This course uses original documents, novels, and other sources to explore the interrelationships between domestic and foreign affairs and to examine the consequences of actions taken at the national and local level.

HS 117 Rebellion, Religion, & Pacifism 3 **Fall** H

Introduces students to core questions regarding religion and violence: 1) Is religion a peaceful or revolutionary force in society? and 2) Is religion conservative or radical? These questions make students aware of the complex dynamics of change in the nature and function of religion. (A Peace and Conflict Studies course).

HS 123 Close Encounters of a Colonial Kind: Cultural Contact in the Americas, 1400-1600 3 **Fall** HI CW

This course focuses upon the Aztec, Inca, Maya, and Spanish empires during the contact and conquest period (1400s-1500s). It explores the people's different cultural, economic, social, philosophical, and political systems and how these cultures, though conquered, shaped the Spanish colonial system. Open to first-year students or by permission of instructor.

HS 151 World Civilizations to 1500 3 **Fall** HI

An introduction to the global historical trends beginning with ancient China, Egypt, Mesopotamia and India and concluding with the Italian Renaissance. Particular emphasis is placed on the varied cultural, ethnic and social themes within traditional topics including the Roman Empire, the Mongol conquests, and Alexander the Great.

HS 152 World Civilizations from 1500 3 **Spring** HI

Examines a variety of historical topics in World History over the last 500 years--including the witchcraft trails in early modern Europe, the Death of Captain Cook in Hawaii, and the rise and fall of Samurai in Japan. A primary goal of the course is to challenge and reorient traditional Eurocentric conceptions of the past while adopting a more globally centered perspective.

HS 202 Old Testament as History & Literature 3 **Fall** H
(see RL 202)

HS 203 New Testament as History & Literature 3 **Spring** H
(see RL 203)

HS 205 Golden Age of Asia to 1400 3 Fall HI

With the rise of civilization in Mesopotamia in the mid-3rd century B.C. and Mongol Empire in the 14th Century A.D. as the bookends of an amazing age of Asian ascendancy, this course traces the classical eras of Persia, India, China, Japan and Southeast Asia.

HS 209 Revolutionaries, Prophets, and Peasants in Russian History 3 Fall HI CW

Studies the intellectual and social history of Russia with an emphasis on the modern period. Particular attention will be paid to the revolutionaries, prophets, and peasants whose writings and actions have shaped the Russian national identity and to the changing relationships between Russia and the West and between different groups within Russia.

HS 211 The Social History of Medicine 3 Fall HI CW

This interdisciplinary course focuses upon medicine and health care from different cultural, historical, political, and social perspectives. It explores the primary features that have shaped medicine and health in the Americas. It explores understandings of human illness and health care; the role of science in health care; the history of medicine; and the professionalization of medicine and health care delivery.

HS 225 Introduction to the History of Islam 3 Fall HI CW

There are almost 1 billion Muslims in the world, but Americans know little about this fast-growing, politically important faith. This course covers the history of Islam from the time of Muhammad to the present. We will explore issues in the history of the Middle East and grapple with such difficult concepts as "Islamic society" and "Islamic law."

HS 231 The Fascist Era: 1918 to 1945 3 Fall HI

Introduces the study of fascism as a European phenomenon of the inter-war period. Particular emphasis is placed on German National Socialism.

HS 246 Modern Culture & Religion 3 Spring H
(see RL 246)

HS 247 History of Christian Thought 3 Spring H CW

A survey of the formative period of Christianity through the time of Augustine. Focus is placed on the evolution and formation of Classic Christian thought and its conflict with heretical Christian ideas.

HS 251 Science in Western Culture 4 Fall or Spring H CW
(see ND 251)

HS 262 North American Environmental History 3 Spring H CW

This course examines how humans have developed on and interacted with different North American natural ecosystems since the 16th century. In particular, the class will focus on the cycle of how the environment initially shapes the range of possibilities for humans at a particular time, and then how humans reshape the environment in response to those possibilities.

HS 263 Sword and Scimitar: Islam and the West, 500-1300 3 Spring HI CW

In this course, we will trace the history of Islam and its relationship with Western Europe in the Middle Ages. Starting with a survey of the world in Mohammed's day, we will continue through the rise and spread of Islam and end of course by studying Muslim-Christian relations in the era of the Crusades.

HS 264 Latin American Society and Culture 3 Fall HI

This course provides a historical overview of Latin American society and culture. It focuses upon the development of colonial societies, the establishment of independent governments, and the major economic, social, and political characteristics of nineteenth and twentieth century Latin America. Throughout, attention will be directed toward the understanding of the "human tradition" of the past and present inhabitants of the region.

HS 265 Modern Asia since 1400 3 **Spring** **HI**
An examination of the rise of Asia beginning with an overview of traditional East, South and Southeast Asia but with an emphasis on the dramatic changes during the nineteenth and twentieth centuries that have transformed the face of Asia.

HS 270 The Vietnam Experience 3 **Spring** **HI**
This course is designed to provide an overview of Vietnamese history dealing with topics such as early Vietnamese history, the colonial period, the rise of Vietnamese nationalism, and the French and American Wars in Vietnam. Special emphasis will be paid to the Vietnamese perspective in the 30-year struggle for independence and national unification.

HS 295 Erotic - Ascetic: The Culture of India 3 **Spring** **HI CW**
The course studies central themes of Indian culture as expressed in religious traditions, the arts, literature and social organizations. Taking contemporary Indian culture as a point of departure, the course will explore origin and development of these themes by analyzing seminal moments in Indian history, ranging from the Vedic Age to the end of the British Raj.

HS 301 European Intellectual History since 1815 3 **Spring** **HI CW**
Analyzes major currents in European thought from Romanticism to the present.

HS 303 Religion and Psychology in Modern History 3 **Spring** **H**
(See RL 303).

HS 305 The American Revolution 3 **Spring** **H CW**
Examines the social, political, economic, and ideological origins and consequences of the American Revolution. Students will use different historical perspectives and techniques to analyze critical issues such as organizing resistance, winning independence, and stabilizing the revolution. Prerequisite: HS 115 or permission of instructor.

HS 309 Civil War and Reconstruction 3 **Spring** **H CW**
Examines the political, social, military, economic and ideological origins and consequences of the Civil War and Reconstruction. The course looks deeply into several important questions: What caused the Civil War? Why was the Union victorious? Why did the war proceed as it did? What was the nature and legacy of Reconstruction? What does this period in our history mean to us now?

HS 311 20th Century American Wars 3 **Spring** **H CW**
Examines individual perceptions of war's purposes and meanings and the changing patterns of personal experience in combat. This course also studies the methods of mobilizing the nation for war, the homefront experience, and the role of technology in altering the nature of war. Little time will be spent discussing tactics or the technical processes of war-making. (A Peace and Conflicts Studies course) Prerequisite: HS 116.

HS 322 Wives, Nuns, and Witches: Women's Lives in Medieval Europe 3 **Spring** **H CW**
What could medieval women do? What was it like to be a nun? Who were witches? There are many interesting questions to ask about women in the middle ages. We will address them through readings about firsthand experiences, both from biographies and from literature. Prerequisite: HS 104 or permission.

HS 323 Social Violence in Latin America 3 **Variable** **HI CW**
Focuses on the changing nature of social violence as a means of viewing the broad panorama of Latin American social history, particularly social tensions that reveal critical periods of transition. Theoretical frameworks for understanding social violence introduce the topic. Prerequisite: HS 264 or permission of instructor. (A Peace and Conflict Studies course).

HS 326 Modern China 3 **Fall** **HI CW**
China over the past hundred years has played a major role in global affairs and is positioned to remain a dominant presence well into the 21st century. This course examines the rise of modern

China focusing on its transition from a traditional Confucian state to a potent economic and political power. Prerequisites: HS 205, HS 265, and HS 295

HS 330 The Mystical Experience: East & West 3 Spring HI
(see RL 330)

HS 346 Oriental Religious Heritage 3 Fall HI
Examines the origins and development of the religious-philosophical heritage of India and China. Special emphasis is placed on Hinduism, Buddhism, Zen-Buddhism, Confucianism, and Taoism.

HS 348 Contemporary Latin America 3 Variable HI CW
Examines the political culture of contemporary Latin America. It pays special attention to the problems of democratization of a traditional authoritarian region by the analysis of factors which retard the emergence of democratic rule. Prerequisite: HS 264 or PS 102 or permission of instructor. (A Peace and Conflict Studies Course).

HS 395 Research Methodology 1 Fall or Spring H
A methodology course taken in area of concentration in conjunction with the 300-level courses or with the seminar. The course will be done by independent study with an instructor in the area of concentration.

HS 399 Special Topics 3 Fall or Spring H CW
Provides supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Examples include the Soul in Stone: Death and Commemoration and Race and Gender in Latin America. Note: abbreviated ST: (title); students may take each ST: course for credit.

HS 401 The Holocaust 3 Variable HI CW
Emphasizes the ideological basis of National Socialist Antisemitism, its formal legalization between 1933 and 1945, the Crystal Night pogrom, forced Jewish emigration and deportation, the Murder Commandos and the Final Solution in the extermination camps. Efforts to rescue Jews from annihilation and post World War II attempts to punish perpetrators of the Holocaust are also investigated. Note: conducted as a research seminar; primary and secondary sources are used. (A Peace and Conflict Studies course).

HS 407 1492: Contact, Conquest and Consequences 3 Variable HI CW
Examines themes central to the historical significance of 1492. These include the nature of cultural contact, the "drama" of conquest (which appreciates both the visions of the conquerors and the conquered), the demographic collapse suffered by native Americans, the impact of American bullion upon the European and world economies, the black legend, cultural exchanges between the two hemispheres, and the intellectual challenge of the new world—both then and now.

HS 412 Exploring Local History 3 Variable H CW
This seminar introduces students to a wide range of community studies and local history methods. Students will then conduct individual research into the history of Central Pennsylvania or other locales. Students will use the Huntingdon County Historical Society, the county courthouse, and other collections of primary sources for their final projects. Prerequisite: HS 115 or 116 or permission of instructor.

HS 490 Philadelphia Urban Semester Internship 2-12 Fall & Spring H
(see the chapter, Special Programs under Internships.) Corequisite: HS 495. Prerequisite: permission.

HS 492 History Internship 2-9 Fall and Spring H
(see the chapter, Special Programs under Internships.) Prerequisite: permission.

HS 495 Senior Research/Seminar 3 Fall or Spring H CW
Serves as a capstone experience that synthesizes materials from history and other disciplines into a substantial written thesis. The senior seminar can be done as an independent study or in conjunction with an internship. When completed, the thesis is presented at a public oral defense. Prerequisite: Completion of all core courses and/or permission of instructor.

HS 496 Senior Research/Seminar 3 **Fall or Spring** H CW

If a student needs to work further on the senior seminar, this will allow three further hours of study in a second semester.

INFORMATION TECHNOLOGY (IT)

Core Faculty

	Office
Professor Rhodes (Endowed Chair)	BSC/A218
Instructor Fusco	BSC/A210

Supporting faculty in other departments

Professor Donaldson (Economics and Business Administration)	Good 416
Professor Weaver (Economics and Business Administration)	Good 418
Assistant Professor Rosenberger (Economics and Business Administration)	Good 410
Assistant Professor Frandsen (Economics and Business Administration)	Good 318
Professor Weimer (English, Communication, & Theatre Arts)	QH 100

Background Information:

Information Technology is a newly formed program to prepare students to be leaders in the field of Information Technology. The common characterization of an information technologist is as the "user's advocate" in the computing world. Information technologists approach technology from the user's point of view rather than from the computer's point of view and tend to think of the computer as a powerful tool for doing a great many things rather than as an end in itself. IT students tend to care more about how people use computers than about how computers work "under the hood." Information Technology compliments existing programs in Business, Computer Science, and Communications.

Special programs, facilities, or equipment:

- State-of-the-art IT classroom
- An advanced networking teaching lab
- Multimedia/e-commerce/database teaching and development studio
- Virtual business incubator
- Cutting edge software
- Cross-disciplinary program

Programs of Emphasis:

- Information Technology

Secondary Emphasis:

- Requirements: 24 or more credits from the core list of courses.

Internship/Research Experiences:

- Lucent Technologies
- PricewaterhouseCoopers
- Wetherill Associates Incorporated

IT 110 Principles of Information Technology 3 **Fall & Spring**
An introduction to concepts of information systems and the "Information Age". Students will develop an understanding of basic computing and information systems principles and the social implications of information and information technology. The course also provides an overview on the creation, organization, analysis, storage, retrieval, and communication of information. The instruction incorporates both collaborative and action learning experience.

IT 270 Web Design and Management 3 **Fall**
A study of modern web page design along with the examination of markup and scripting languages (e.g., HTML, JavaScript), page, image and multimedia formats, and the techniques in developing

and managing a web site. Page design, graphical user interfaces, interactive techniques and the importance of e-commerce are also emphasized. Prerequisites: CS101 or CS 110

IT 280 Innovations for Industry I 4 **Fall & Spring**
This course will require a team of students to function as a project development team for an IT-related business. The students will be exposed to many aspects of systems analysis, design, development, and implementation, as well as project management tools and techniques. Students will be required to learn in a just-in-time mode using on-demand educational. Prerequisites: IT 200 and 9 credits from the IT core courses.

IT 299 Special Topics 1-3 **Variable**
Provides access to branches of Information Technology not currently included in the regular course offerings. Prerequisites: Variable depending on the course.

IT 305 Software Models and User Interfaces 3 **Fall**
(Cross-listed as CS course) A study of current software implementation models. Models of procedural based control for both batch and interactive settings, event driven control, real time control and exception handling are considered within representative interactive development environments such as Java and Visual Basic. Design of graphical user interfaces for web-based and windows-based applications are integrated into the team projects. Prerequisites: CS 240.

IT 325 Network Design and Management 4 **Spring**
Focuses on the concepts of the foundations of a network in both design and support. The OSI reference model will be examined along with techniques for supporting current technologies that align with each layer. Emphasis will be placed on protocols, topologies and traffic analysis. Prerequisites: CS 240.

IT 380 Innovations for Industry II 4 **Fall & Spring**
A continuation of IT 280. Prerequisites: IT 280.

IT 399 Special Topics 1-3 **Variable**
Provides access to branches of Information Technology not currently included in the regular course offerings. Prerequisites: Variable depending on the course.

IT 480 Innovations for Industry III 4 **Fall & Spring**
A continuation of IT 280 and 380. Prerequisites: IT 380

INTERNATIONAL STUDIES (IS)

	Office
Assistant Professor Nagengast	Good 316
Associate Professor Henderson	Hum 206
Professor Roney (Director)	Hum 204
Associate Professor Sowell	IHB 202

An awareness of international issues and the ways in which people understand and fail to understand one another requires an appreciation of the complex interactions between the economic, social, political, and cultural variables that affect human existence. At Juniata College, the International Studies Program involves a unique, interdisciplinary combination of common experiences, individualized areas of concentration, language study, study abroad and a cooperative research colloquium for seniors. Primary areas of concentration include Modern Western Europe, Slavic or Iberian/Latin American, while secondary areas of concentration may be selected from Modern Western Europe, Slavic, Iberian/Latin American, Mid-East, Pre-Modern, or International Politics. All areas of concentration include courses from a variety of disciplines including history, political science, philosophy, music, business and economics, art, sociology, anthropology, religion, English, German, Russian, Spanish, and French. The distinctive feature of this program is its emphasis on the development of each individual student.

IS 104 Introduction to International Studies: Ideas and Power in the Modern World — 4 — Spring — IHS CW

An integrative examination of human experience with an emphasis on language, gender, race and literature and the ways in which different cultures understand human reality.

IS 200 The Politics & Culture of Modernization: The Modern World-How We Got There and What It Means — 4 — Fall or Spring — IHS CW

Examines the processes of globilization and modernization and the changing political and cultural ideas which have accompanied them. Uses various media and materials from different cultures to ask who and where we are and how we got there.

IS 400 Senior Seminar in International Studies — 3 — Fall — IHS CW

Provides students who have recently returned from study abroad with a common focus for the exchange of ideas about diverse international experiences. Annual topics will be chosen from international politics, literature, and culture. Intensive classroom discussions of the weekly readings will allow each student to contribute to the collective learning process, regardless of their individual areas of concentration. Prerequisites: Senior status; study abroad and/or IS 104W or permission of the instructor.

MATHEMATICS AND COMPUTER SCIENCE (MA, CS)

	Office
Assistant Professor Bukowski	BSC/A301
Professor Esch (Dana Professor) (Chair)	BSC/A302
Assistant Professor Ray	BSC/P221
Professor Rhodes	BSC/A218
Assistant Professor Stenson	BSC/A301
Professor Sunderland	BSC/A300
Assistant Professor Wilce	BSC/A304

Background Information:

We are fortunate to have combined Mathematics and Computer Science Department, and to enjoy close ties with both the Physics and Economics/Business departments. Often called the universal language, mathematics underlies a great part of the physical sciences, and also has important connections to philosophy, economics and business, music, and many other fields. A close working relationship with the Education Department supports a strong preparation for teaching mathematics at the secondary level. The program in Computer Science develops problem solving and analytical skills through the study and implementation of algorithms, systems design and software development on modern computation platforms and provides the skills that adapt well with the fast changing hardware and software of today and the future.

Special programs, facilities, or equipment:

- Variety of mathematical software, including Maple and Mathematica, the statistical packages Minitab and SPSS, and typesetting program LaTeX.
- Opportunity to attend monthly Mathematics Colloquium
- Major programming languages used in the industry (C++, Java, Visual BASIC, FORTRAN, COBOL, Perl, Ada, etc.)
- Programs developed for special purposes (HTML, Pascal, Smalltalk, LISP, Scheme, ML, etc.)
- Variety of platforms, including DEC Alpha NT file, mail, and print servers, a VAX VMS system, a World Wide Web server, and an HP UNIX workstation

Programs of Emphasis:

- Mathematics
- Mathematics/Secondary Education
- Computer Science

Student Designed Programs of Emphasis:

- Mathematics/Computer Science
- Mathematics/Physics
- Mathematics/Chemistry
- Mathematics/Business
- Computer Science/Networking
- Computer Science/Graphic Design

Secondary Emphasis:

- Requirements for a secondary emphases in Mathematics, Computer Programming or Computer Science are available and can be found at: http://www.juniata.edu/csmath/secemph.htm

Internship/Research Experiences:

- MASS program at Penn State University
- National Museum of American History
- PricewaterhouseCoopers
- Lucent Technologies Inc.
- Argonne National Laboratory

COMPUTER SCIENCE (CS)

CS 101 Introduction to Computer Science 3 **Fall & Spring** N
A survey of computer science for non-science students. The recurring theme on the limitations of computers and computation is woven into an overview of system hardware and software, spreadsheets, web pages, and Javascript programming, along with discussions of societal issues. No prerequisites (cannot be taken if three credits in computer science have already been earned.)

CS 110 Computer Science I 4 **Fall & Spring** N
An introductory study of computer science software development concepts. C++ is used to introduce a disciplined approach to problem solving methods, algorithm development, software design, coding, debugging, testing, and documentation in the object oriented paradigm. This is the first course in the study of computer science. Prerequisite: programming experience or CS 101 or MA 103.

Computer Programming
CS 200, CS 210
CS 250, CS 252, CS 254, CS 256, CS 260 2 **Spring** N
1
Each course is a self-paced introduction to a different programming language. The students will prepare a portfolio of computer programs written in the language. The programs are reviewed, critiqued, and then the student has an opportunity to revise them as needed for final inclusion in the portfolio. Prerequisites: CS 110 and sophomore standing and permission. 1-2 credits each.

CS 220 Computer Organization 4 **Fall** N
An introduction to digital computer systems including a treatment of logic and digital circuits, data representation, device characteristics and register transfer notation covered in a manner that stresses application of basic problem solving techniques to both hardware and software design. Students study an assembly language to reinforce and to experiment with these systems and design concepts. Prerequisite: CS 110.

CS 240 Computer Science II 3 **Spring** N
A continued study of computer science foundations as begun in Computer Science I. An object-oriented language such as C++ is used to develop and implement large programs involving various data structures and data abstraction as exemplified by packages and modules. Searching, sorting, advanced data structures, software development methodology and analysis are emphasized. Prerequisite: CS 110.

CS 300 Software Design 3 **Odd Years** N
Spring CW
An introduction to the issues of software design. Topics include software engineering, human-computer interfacing and development of projects in a modern design environment, such as Windows. The students work in teams to develop, implement and fully document a computer project to apply these concepts. Prerequisite: CS 240.

CS 310 Discrete Computational Structures 4 **Odd Years** N
Fall
Emphasizes mathematical structures (including relations, graphs, Boolean algebras, finite automata, and formal languages) and their applications to the theory of computer science. Prerequisites: CS 110 and MA 110 and MA 210. (Also listed as MA 310).

CS 315 Algorithms and Analysis 4 Spring N

The study and analysis of algorithms, their complexity and supporting data structures. Topics may include searching, sorting, mathematical algorithms, tree and graph algorithms, the classes of P and NP, NP-complete and intractable problems, and parallel algorithms. Prerequisites: CS 240 and MA 110 and MA 210.

CS 320 Operating Systems 4 Even Years N
Fall

An introduction to the theory, evaluation, and implementation of computer operating systems. Topics include memory, process and resource management, system structure, scheduling, elementary queuing models, and distributed network systems. Prerequisites: CS 220 and CS 240.

CS 330 Computer Graphics 3 Even Years N
Spring

An introduction to both the hardware and software utilized in computer graphics. The emphasis is on creating a working graphics system from the ground up but modern protocols and application are also discussed and utilized. Prerequisites: MA 110 and CS 240.

CS 340 Numerical Analysis 3 Even Years N
Fall QM

(see MA 340).

CS 362 Languages & Translation 4 Odd Years N
Spring

A systematic approach to the study and analysis of computer programming languages. The procedural, functional, object-oriented and logical language paradigms are examined through the use of representative languages. Syntax and semantics issues are emphasized through the study of translation techniques in formal labs and group projects. Prerequisites: CS 220 and CS 240 and CS 310.

CS 370 Database Management Systems 3 Odd Years N
Fall

Focuses on concepts and structures necessary to design and implement a database management system. Various modern data models, data security and integrity, and concurrency are discussed. An SQL database system is designed and implemented as a group project. Prerequisite: CS 200 or CS 210 or CS 240.

CS 399 Special Topics 3 Spring N

An introduction to one of the branches of computer science not currently included in the regular course offerings, such as theory of computation, artificial intelligence, parallel processing, computer architecture, etc. Prerequisites: Variable, depending upon the course. Note: abbreviated ST: (title); students may take each ST course for credit.

CS 480 Computer Science Seminar I 1 Fall & Spring N

Discusses current advances in computer science not otherwise covered in our program, such as, but not limited to, networking, artificial intelligence, societal issues. In addition, this course allows senior students to plan an individual research project to be completed in CS 485. This course taken by a junior may be repeated as a senior as CS 481. Prerequisite: junior or senior standing, and CS 220 or CS 240.

CS 481 Computer Science Seminar II 1 Fall & Spring N

(see CS 480). Prerequisite: CS 480.

CS 485 Computer Science Research 3-5 Fall & Spring N
CW

Allows students to carry out the independent computer science research project as designed in CS 480 or CS 481. Prerequisite: CS 480 or CS 481.

CS 490 Computer Science Internship 2-9 Fall & Spring N

A placement with an organization having a data processing department. An indepth exposure to the practice of computer science in a computer processing environment is provided. Note: may be repeated up to a total of 9 hours credit. Corequisite: CS 495. Prerequisites: Permission.

CS 495 Internship Research/Seminar 2-6 Fall & Spring N
CW

Requires students to reflect on the internship experience and/or pursue research related to the place-

ment. Note: may be repeated up to a total of 6 hours of credit. Corequisite: CS 490. Prerequisites: Permission.

MATHEMATICS (MA)

Many of the mathematics courses use mathematical software such as Maple and statistics software such as Minitab to facilitate computation and aid mathematical reasoning.

MA 100 Precalculus 3 **Fall & Spring** N QM

This course is designed for students who need a structured review of precalculus mathematics. Topics covered include solving equations and inequalities, graphing, and analysis of functions, including polynomial and rational functions, exponential and logarithmic functions, and trigonometric functions. Integrates the use of the software package Maple in classroom demonstrations and homework assignments. This course cannot be included in a mathematics POE. Prerequisite: high school algebra and trigonometry.

MA 103 Quantitative Methods 3 **Fall & Spring** Q

This course provides basic quantitative literacy necessary to participate fully in today's quantitative world, and the computer literacy essential to exploring and presenting quantitative problems. The topics include: statistical reasoning (implemented in Minitab), graphical, numerical, and algebraic reasoning (implemented in Maple), and the coordination of quantitative output and verbal arguments into simple reports produced in Word. Prerequisite: high school algebra.

MA 110 Linear Algebra 3 **Fall & Spring** N QM

An introduction to systems of linear equations, matrices, determinants, vector spaces, linear transformations, eigenvalues, and applications. Prerequisite: high school algebra and trigonometry.

MA 130 Calculus I 4 **Fall & Spring** N QM

An introduction to calculus including differentiation and integration of elementary functions of a single variable, limits, tangents, chain rule, rates of change, maxima and minima, area, volume, and other applications. Integrates the use of computer algebra systems and graphical, algebraic and numerical thinking.

MA 210 Foundations of Discrete Mathematics 3 **Spring** CW

An introduction to the logical and set-theoretic basis of modern mathematics. Topics covered include propositional and predicate logic, induction and recursion, sets, relations, functions, and cardinality. Students will be expected to develop some fluency in reading and writing proofs. Prerequisite: M130 or M110 or permission.

MA 220 Introduction to Probability and Statistics 4 **Fall or Spring** N QS

An introduction to the basic ideas and techniques of probability theory and to selected topics in statistics, such as sampling theory, confidence intervals, hypothesis testing, and linear regression. Prerequisite: MA 130.

MA 230 Calculus II 4 **Fall & Spring** N QM

Expands the treatment of two-space using polar and parametric equations. Emphasizes multivariable calculus including vectors in three dimensions, curves and surfaces in space, functions of several variables, partial differentiation, multiple integration, and applications. Prerequisite: MA 130.

MA 235 Calculus III 4 **Fall** N QM

A continuation of the calculus sequence. Topics include integration by parts, Simpson's Rule, applications, Taylor and Fourier series; introduction to ordinary differential equations; integration in polar, cylindrical, and spherical coordinates; differential and integral vector calculus. Prerequisites: MA 110 and MA 230.

MA 303 Mathematical Modeling 3 Fall N QM,CW

How to use mathematics to model "real-world" problems. Modeling topics range from population dynamics to economics to the nuclear arms race. Mathematical tools range from calculus to curve fitting to computer simulation. How to make a little bit of mathematics go a long way. Note: MA 110 is recommended. Prerequisites: MA 130 and some experience with programming and Minitab.

MA 310 Discrete Computational Structures 4 Fall N
(see CS 310)

MA 320 Probability & Statistics 3 Even Years N
Spring QS

Topics in mathematical statistics including discrete and continuous random variables, expectations, mean, variance, moment-generating functions, multivariate distributions, correlation, and independence, all leading to an efficient study of the binomial, Poisson, gamma, chi-square, and normal distributions. Note: MA 235 is recommended. Prerequisites: MA 220 and MA 230.

MA 335 Differential Equations 4 Spring N
QM

The theory and application of ordinary and partial differential equations. The introduction to differential equations contained in the calculus sequence serves as the basis. Prerequisites: MA 110 and MA 230.

MA 340 Numerical Analysis 3 Even Years N
Fall QM

Theory and application of numerical approximation techniques. Topics included are numerical error, root-finding, interpolation and polynomial approximation, numerical differentiation and integration, and differential equations. Prerequisites: MA 110 and MA 130 and CS 110 or permission. (Also listed as CS 340.)

MA 350 Topics in Geometry 3 Odd Years
Spring

Examines the history and development of geometry with an axiomatic development of Euclidean geometry leading to an investigation of hyperbolic and elliptical non-Euclidean geometries. The role of these discoveries in the history of mathematics is emphasized. Prerequisite: PL 208 or MA 210.

MA 355 Nature of Mathematics 1 Odd Years
Spring

An introduction to the history and philosophy of mathematics. Briefly traces the historical development of mathematics from its Oriental and Greek origins to modern times. Surveys the different philosophies of mathematics and provides some insight into the current crisis in the foundations of mathematics. Corequisite: MA 350. Prerequisite: PL 208 or MA 210.

MA 360 Abstract Algebra 3 Even Years
Spring CW

Investigates the algebraic properties of the real numbers and their generalizations. Included are an introduction to groups, integral domains, rings, and fields. Applies selected topics to computer science as time permits. Prerequisites: MA 110 and MA 210.

MA 370 Real Analysis 3 Odd Years
Spring

Includes topics such as functions of a real variable, sequences, limits, continuity, differentiation, and the derivation of standard theorems of the differential calculus. Prerequisites: MA 210 and MA 230 and MA 235.

MA 399 Special Topics 3 Fall & Spring N
An introduction to one of the branches of mathematics not currently included in the regular course offerings, such as number theory, complex analysis, topology, graph theory, mathematical logic, partial differential equations. Prerequisites: Variable, depending on the course. Note: abbreviated ST: (title); students may take each ST course for credit.

MA 480 Mathematics Seminar I 1 Fall N
Discusses advanced topics in mathematics not otherwise covered in our program, e.g., graph theory, Galois theory, general and algebraic topology, lattice theory, measure theory, functional analysis. The exact content will vary from semester to semester to reflect student and faculty interests. In

addition, this course allows students intending to take MA 485 an opportunity to identify a topic for independent research. This course taken by a junior may be repeated as a senior as MA 481. Prerequisites: junior or senior standing, and MA 110, MA 135 and MA 210.

MA 481 Mathematics Seminar II 1 **Fall** N
(see MA 480) Prerequisite: MA 480.

MA 485 Mathematics Research 3 **Spring** N
Allows students to pursue a program of directed original research in pure or applied mathematics. Required of candidates for distinction in the Mathematics POE. Prerequisite: MA 480.

MA 490 Mathematics Internship 2-9 **Fall & Spring** N
Placement with an organization applying mathematical techniques such as statistical analysis, operations research, actuarial mathematics, or systems analysis. Designed to afford the student an opportunity to apply analytical and technical skills developed in the POE. Corequisite: MA 495. Prerequisites: Permission.

MA 495 Internship Research/ Seminar 2-6 **Fall & Spring** N
CW
Requires the student to reflect on the internship experience and/or pursue study or research related to the placement. Corequisite: MA 490.

MUSIC (MS, MU)

	Office
Assistant Professor Bargiel	Swigart
Lecturer Calvert	Swigart
Lecturer McKinstry	Swigart
Lecturer Mullen	Swigart
Lecturer Ochiai	Swigart
Assistant Professor Shelley (Chair)	Swigart
Lecturer White	Swigart

Background Information:

The Department of Music provides opportunities for students to improve their understanding of music as a form of creative expression. Departmental courses and activities offer students the chance to develop their abilities as performers and listeners in order to perceive the subtleties of musical expression, as well as to approach music as a reflection of the cultures in which it is found.

Special programs, facilities, or equipment:

- Concert Choir: performs a variety of choral music, performances include on-campus programs, an annual Spring Tour, and yearly exchange concerts with other college choirs. The College Choir undertakes an international tour every four years.
- Choral Union: performs larger works to develop vocal ability, one major on-campus performance per semester.
- Wind Symphony: a year-round concert band that plays 3 concerts a year (pianists occasionally used).
- String Ensemble: a chamber ensemble for orchestral strings (pianists are occasionally used).
- Chamber Ensembles: vary from semester to semester; offshoots of the Wind Symphony and the private studios. Have included percussion ensemble, flute choir, brass ensemble and horn quartet.
- Yamaha piano lab: used with 100-level courses.
- Oller Hall: a 900 seat concert hall that boasts a three-manual electropneumonic Moller pipe organ.

Programs of Emphasis:

- Juniata does not offer a POE in Music

MS 101 Music Fundamentals 3 **Fall & Spring** **F**
Designed to teach students the basic tools and elements of music. Students learn to become literate in the fundamentals of music (note reading, intervals, scales, chords, rhythms, structure...) and apply that knowledge to composition (e.g. a group project composing a brief "percussion" ensemble piece, and basic piano skills.)

MS 110 Survey of Western Music 3 **Spring** **F**
Uses the historical development of "Western" music as the basis for forming a better understanding of the art of music. Listening skills are developed over the course of the semester.

MS 341 Music for Classroom Teachers 3 **Fall** **F**
Develops skills needed to incorporate music in the elementary classroom. These skills include being able to sing in tune and perform songs with consistent tempo and accurate meter; learn a new song on his/her own and play the melody on piano; lead music activities and teach a song to others; and, select music materials appropriate for children.

APPLIED MUSIC

Three credit hours of any MU course/studio on the same instrument, voice or ensemble fulfills a Distribution requirement. An additional three hours on the same instrument or voice used in the initial Distribution requirement fulfill a complete Distribution requirement. [See page 35 "Distribution" for more information]. Regular practice outside of class is required, public performances are required at the 300 level and up, and each course concludes with a final playing/singing proficiency examination consisting of minimum skill requirements based on the studio level. Minimum proficiency requirements for each area and level are available from music department faculty. 100-level courses develop basic skills (reading musical notation, elementary theory, and handling of the instrument.) At the 200 through 400 levels, these fundamentals expand into the realm of musical expressiveness and interpretation. Students accomplish this by studying pieces of ever-increasing difficulty and complexity. Private lessons and applied music classes are available to all students. One-half hour lessons earn one credit and carry a $215.00 fee. One hour lessons earn two credits and carry a $430.00 fee. (Guitar and Voice classes carry no fee.)

Studio Instruction
MU 111, 112 — 1 — **Fall & Spring**
MU 211, 212, 311, 312, 411, 412 — 1 or 2 — **Fall & Spring**
Students must supply their own instruments.

Guitar Class (No Fee)
MU 113, 114, 153, 154 — 1 — **Fall & Spring**
Students meet with the instructor for one hour per week. Students must supply their own instruments and music stands.

Voice Class (No Fee)
MU 131, 132 — 2 — **Fall & Spring**
For students with no previous formal training in voice. Two fifty-five minute class sessions per week incorporating group and individual work.

Juniata College Choral Union
MU 171, 172, 173, 174, 175, 176, 177, 178 — 1 — **Fall & Spring**
Performs larger works to develop vocal ability, sight-reading, diction skills, and musicianship. One major on-campus performance per semester. Rehearsals are Tuesdays 6:30-8:00 PM.

Juniata College Concert Choir
MU 181, 182, 183, 184, 185, 186, 187, 188 — 1 — **Fall & Spring**
Performs a variety of choral music chosen to develop vocal ability, sight-reading, multi-lingual diction skills, and musicianship. Performances include on-campus programs, an annual Spring Tour, and yearly exchange concerts with other collegiate choirs. The College Choir undertakes an international tour every four years. Members selected through audition. Rehearsals are MWF 12:00-12:55. Individual and group practice outside of rehearsal is required.

Juniata College Wind Symphony
MU 191, 192, 193, 194, 195, 196, 197, 198 — 1 — **Fall & Spring**
Performs a variety of wind and percussion music (concert band literature) chosen to develop ensemble- playing abilities and musicianship. Rehearsals and concerts emphasize the communicative aspects of music and the development of the tools that are necessary to produce a high-quality ensemble experience. Members are selected through audition. Regular full rehearsals are on MW evenings from 6:10-8:00 in the Ellis Ballroom. Practice and sectionals outside of the full rehearsal are required

Juniata College Chamber Choir
MU 281, 282 — 1 — **Fall**
Performs madrigals in fully-costumed and produced Elizabethan Madrigal Dinners each December. (Students are responsible for costumes.) Rehearsals are Tuesdays 8:00-9:15 PM.

Juniata College String Ensemble 1 **Fall & Spring**
MU 141-148
Performs a wide variety of string ensemble music chosen to develop ensemble playing abilities and musicianship. Rehearsals and concerts emphasize the communicative aspects of music and the development of the tools that are necessary to produce a high quality ensemble experience. Practice outside of the full rehearsals is required.

NON-DEPARTMENTAL (ND, ND.SS)

	Office
Professor Drews	Good 406
Instructor Dudash (Public Service Librarian)	Beeghly
Instructor Mumford (Library Director)	Beeghly
Professor Stroman	Good 414

While many interdisciplinary courses are found among the College's department offerings, some are taught outside that structure. They may be used in constructing a Program of Emphasis.

ND 102 Introduction to Library Research 1 **Fall and Spring** H

This one hour, one semester course is designed to teach students the fundamentals of library research, from the basic organization of materials through the analytical process of determining useful and appropriate research materials. This course is taught every semester by the library staff, and there is no prerequisite.

ND 201 Service-Learning 1 **Fall and Spring** S

Students volunteer in the community surrounding the Juniata College campus. They have the opportunity to broaden and deepen their understanding of people as they interact with those who are different from themselves. This will also lead to fostering better relations between the surrounding communities and the college as students will be visibly meeting the needs of those in the communities. As a result of volunteering, students should be inspired to continue developing an ethic of service and civic responsibility. May be repeated to a total of 4 credits. (second semester freshmen, sophomore, junior or senior standing)

ND 251 Science in Western Culture 4 **Spring** H CW

A consideration of the changing views of the study of nature (science) from ancient Babylonians to the 20th Century, emphasizing the interaction of the study of nature with the culture of each era studied, especially the philosophical and religious interactions. Course emphasizes development of skills in oral and written presentation and a research paper.

ND.SS 100 Career Planning 1 **Fall & Spring** S

Examines occupational choice and career development and provides the learner with opportunity to become more aware of his/her interests, values and capacities as they relate to the career decision making process. Note: designed for freshmen, sophomores, or students considering a P.O.E. change.

ND.SS 214 Statistics for Social Science 4 **Fall** S QS

An introduction to descriptive and inferential statistical techniques used in the social sciences. Primary emphasis is placed on learning to choose and interpret techniques for various kinds of data. Note: Normally only ND.SS 214 or BI 305 may be taken for credit

ND.SS 215 Social Science Research Methods 4 **Spring** S

An analysis of the strengths and limitations of the methods of collecting and interpreting data in the social sciences with an emphasis on surveys, experimental designs and observations. Prerequisite: ND.SS 214.

PEACE AND CONFLICT STUDIES (PACS)

	Office
Associate Professor Cook-Huffman	OC
Professor Murray (Chair)	OC

Background Information:

Peace Studies is an interdisciplinary inquiry into war and deeply rooted conflict as human problems, and, peace as a human potential. It emerged as a field of study in the 1940's, partly as a response to the horrors of two world wars. It systematically explores how and why humans resort to violence to resolve conflicts, and imagines social systems that are more likely to lead to cooperation and peace.

Special programs, facilities, or equipment:

- General library collection for Peace Studies consisting of over 4,000 volumes.
- Rich array of speakers, including diplomats, law and policy makers, researchers, activists, educators, Nobel Peace Prize winners, admirals, generals, victims, revolutionaries, entertainers and athletes.
- Students have opportunities to work with several important UN projects as well as make presentations at the United Nations.
- Peace and Conflict Studies committee.

Programs of Emphasis:

- Peace and Conflict Studies

Student Designed Programs of Emphasis:

- World Politics and Conflict Studies
- Conflict Resolution/Communications
- Peace and Environmental Studies
- Social Conflict Studies
- Political Peace Making
- International Conflict Resolution

Secondary Emphasis:

- Requirements: PACS 105, PACS 200W, plus at least 12 credits selected from PACS courses.

Internship/Research Experiences:

- UN Non-Governmental Organizations, Committee on Disarmament
- Washington D.C Center for Research on Women
- Galapagos Islands: Environmental Conflict
- India: research on nuclear arms race

PACS 105 Introduction to Conflict Resolution 3 **Fall** S
A survey of the field of conflict studies which introduces students to the basic theory and practice of conflict resolution in interpersonal, intergroup, and international contexts. Focuses on developing analysis skills which allow the student to discern the relevance of theory for specific contexts, and understand the processes of conflict escalation and deescalation. Students learn and practice skills for resolving conflicts in their daily lives.

PACS 108 Mediation 1-3 **Spring** S
Students learn a basic model of interpersonal mediation and the theoretical framework which guides its use. Role plays and simulations are used to develop mediation skills and to model training techniques. Students may take the course for 2 or 3 credits.

PACS 117 Rebellion, Religion & Pacifism 3 Fall H
(see HS 117)

PACS 200 Introduction to Peace & Conflict Studies 4 Spring I CW

A review of basic peace studies literature and research and an introduction to the typologies of peace and conflict. The course is interdisciplinary, using insights especially from political science, history, psychology, anthropology, and sociology in examining war and deep rooted conflict as human problems. An overnight negotiation simulation is required.

PACS 204 From Napoleon to Monnet 4 Spring I CW

Taught by a team from History, Physics, and Peace Studies, this course is an interdisciplinary inquiry into a period of time from the rise of Napoleon Bonaparte to the birth of the European Union under the leadership of Jean Monnet. It will use the lives of two Frenchmen as biographical bookends to an historical era that saw the birth of the nation state, partiotism, modern total war, nonviolent resistance, global economic interdependence, and international military forces. It will explore the lives of two men, Napoleon and Jean Monnet, who could arguably be considered history's greatest warrior and greatest peacemaker respectively. It will look at their lives in the context of a slice of history and a global culture that gave rise to Hitler, Gandhi, and Rock and Roll. (A CA I course)

PACS 205 Conflict Intervention 3 Even Years Spring S CW

An in-depth exploration of the roles third parties play in managing and resolving conflicts. Students are introduced to a variety of intervention strategies ranging from organizing and advocating for social change, to structuring resolution processes applicable to conflicts at interpersonal, organizational and international levels. Particular attention is given to environmental disputes. Role plays are used to help students focus on and become skilled at using a particular intervention strategy. Prerequisite: PACS 105, or PACS 108, or permission.

PACS 208 Psychology of War and Peace 3 Spring S
(see PY 208) Prerequisite: PACS 200, PY 101, or PACS 105

PACS 213 Mineral Economics, Politics & Law 3 Fall I CW
(see GL 213)

PACS 235 Tolstoy 3 Spring HI CW,CS
(see RU 235)

PACS 311 20th Century American Wars 3 Spring H CW
(see HS 311)

PACS 300 Anthropology of War & Peace 3 Alternate Years Fall
(see SO 300)

PACS 305 Gender and Conflict 3 Fall S CW

An exploration of the relationship between gender and conflict. The course explores the effect of gender identities and gender roles on conflicts ranging from the proverbial "war between the sexes," and the particular experiences of women and men in conflict, to larger social conflicts involving issues of equality, oppression and violence against women.

PACS 308 Nonviolence: Theory and Practice 3 Fall or Spring HS CW

A study of the theory and practice of nonviolence, this course explores both the theoretical development of nonviolence and the use of nonviolence as a means for waging and resolving conflict. The course explores nonviolence theory as it applies to issues of social change, alternative defense, and personal transformation, using writings from political, sociological, feminist, religious and philosophical perspectives. Prerequisite: sophomore standing recommended.

PACS 323 Social Violence in Latin America 3 Spring HI CW
(see HS 323)

PACS 332 International Law and Human Rights 3 Odd Years Fall SI CW
(see PS 332)

PACS 335 Tolstoy 4 Spring HI CW
(see RU 335)

PACS 348 Contemporary Latin America 3 Spring HI CW
(see HS 348)

PACS 355 The Idea of War 3 Odd Years Fall HI CW,CS

In a seminar setting, students read and discuss the writings of Sun Tsu, Thucydides, Machiavelli, and Clausewitz. These classic writers who have influenced the "idea of war" in Western thought will be discussed in the context of more recent scholarship. Prerequisites: PACS 200 or PS 222 or PS 102. (A CAII Course)

PACS 401 The Holocaust 3 Spring HI CW
(see HS 401)

PACS 455 PACS Senior Thesis 3-6 Fall H CW

Designed to serve as a capstone course for students who emphasize PACS in their POE. The student will be expected to produce a major research paper which examines in depth a topic, theme, issue, or problem that has served as an area of special interest for the student throughout the previous two years of study. Prerequisites: senior standing, PACS 200 and a minimum of 4 other 200+ level PACS courses.

PACS 490 Peace & International Internship 2-9 Fall & Spring I

An opportunity which requires students to relate theory and practice to a working environment and to reflect upon that experience. Students are supervised by the Washington Center and placed in a Washington office which deals directly with peace and/or international relations issues. Corequisite: ND.PC 495. Prerequisite: permission.

PACS 495 Peace & International Internship Research 2-6 Fall & Spring I

Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: ND.PC 490. Prerequisite: permission.

PHILOSOPHY (PL)

Associate Professor Lewis (Chair) — Office Good 405
Professor R. Wagoner — IHB 101
Assistant Professor Wang — Good 420

Background Information:

The department seeks to engage students in those kinds of careful and critical thinking which relate to the total life experience: logic, ethics, aesthetics, methods of knowing, and levels of being. Hence, in addition to fairly standard introductory courses, the department develops offerings of special interest to students in such diverse areas as biology, psychology, economics and business, education, and mathematics. Students seeking more specialized professional training in philosophy pursue individual, upper-level tutorials and independent studies with members of the philosophy faculty.

Special programs, facilities, or equipment:

- Philosophy club
- Club discussion includes, animal rights, the value of human life, mind control, freedom of expression, genetic engineering, as well as cloning and many others.

Programs of Emphasis:

- Secondary emphasis only

Student Designed Programs of Emphasis:

- Philosophy/Religion
- Psychology/Philosophy
- Environmental Science/Philosophy
- Peace and Conflict Studies/Philosophy

PL 105 Introduction to Logic — 3 — Spring — H

An analysis of practical reasoning skills, including a systematic approach to informal arguments and the meaning of everyday claims. Aristotelian logic, Venn Diagrams, propositional logic, and symbolic logic are included.

PL 106 Introduction to Ethics — 3 — Spring — H CW

Examines the historically valid ethical approaches to problems, i.e., pragmatic, relativistic, and absolute and the application of such methods to contemporary ethical dilemmas, e.g., abortion, terrorism, euthanasia, and capital punishment.

PL 115 Human Nature — 3 — Fall — H

An introduction to philosophy through an examination of seven theories of human nature: Plato, Marx, Freud, Sartre, Hobbes, Skinner, and Christianity.

PL 201 Plato and Aristotle — 3 — Fall — H

The historical and critical examination of the two founding fathers of western philosophy, emphasizing their attitudes about knowledge, reality, ethical values, and epistemology. Prerequisite: PL 105 or PL 106 or PL 115 or PL 240.

PL 208 Symbolic Logic — 3 — Fall — H

An introduction to the basics of first-order logic: the concept of artificial language, techniques for symbolizing ordinary languages and arguments, formal inference systems (either truth-free method or natural deduction), and other advanced topics in first-order logic. The primary intended audience is students in the symbolic sciences (computer science, information technology, mathematics, linguistics, and philosophy). It has no prerequisites beyond high school algebra.

PL 221 American Political Thought 3 Spring H CW
(see PS 221)

PL 222 Introduction to Western Political Thought 3 Fall H CW
(See PS 222)

PL 230 Business Ethics 3 Spring H CW

Asks the student to examine his/her personal values relative to those professional values of the business world. In particular, students will examine the claims of society, government, labor, management as they impact upon the individual who contemplates a career in the business world. Issues such as safety in the work place, the right to privacy, the obligations of the corporation to its employees, its customers and to society itself will be covered.

PL 235 The Ethics of Health Care 3 Fall H CW

This course is a seminar style course in 'professional ethics'. It will explore the various codes, value assumptions and dilemmas faced by those who practice the health care professions. Specific topics (or dilemmas) will be determined by each class, based upon the specific POEs of the enrolled students.

PL 240 Ideas of Love 3 Fall or Spring H

An examination of the concept of love and its different meanings in Western culture with particular attention to the classical idea, Christian love, aesthetics vs. ethical love, friendship and existential love.

PL 245 Chinese Philosophy 3 Alternate Yrs HI
Fall or Spring CW

The course will focus on the mainstream of the development of Chinese philosophy in the past two thousand years, namely, classical Confucianism and Taoism.

PL 255 Philosophy of Religion 3 Spring H

A critical investigation of some of the main concepts of religion and theology. The course focuses on problems in the definition of religion, the idea of God, the nature of religious experience, the relation of faith and reason, and the meaning of religious language.

PL 291 Myth and Reason—The War of the Worlds 3 Alternate Years
Fall H

The course will focus primarily on Homer's Iliad, with some attention to Hesiod's Theogony and other ancient texts, in order to see the contrast as well as the similarities between the mythic world of archaic times and the forms of discursive reason invented by the classical Greeks. The tension between myth and reason—the "ancient quarrel between poetry and philosophy" referred to by Plato—will be explored in order to see how the problem persists in present-day discourse. Prerequisites: Recommended - HS 100 or PL 201 or EN 360.

PL 301 Modern Philosophy 3 Spring H

Selections from the founders of Contemporary Scientific thought (Bacon, Descartes, Liebnitz, Locke, and Hume) are analyzed and interpreted vis-a-vis the history of the rise of modern science with emphasis on the problem, "What is the scope and validity of knowledge?" Prerequisite: PL 105 or PL 106 or PL 115 or PL 240.

PL 304 Existentialism 3 Fall or Spring H

Philosophers such as Kierkegaard, Nietzsche, Heidegger, and Sartre are studied as an introduction to existentialist thought. Theistic and atheistic types are considered, as is significance of existentialism as a contemporary philosophy. Prerequisite: PL 201 or PL 301.

PL/PC 314 The Philosophy of Physical Sciences 3 Some Years NH
Spring CW

Explores philosophical issues in the physical sciences, emphasizing problems of space, time, motion, and difficulties concerning scientific explanation, causation, and laws of nature. Topics may include the nature of geometrical knowledge; philosophical impact of relativity theory; absolute versus relative conceptions of space and time; problems of measurement, experimentation, and testing hypothesis; and philosophical issues raised by quantum mechanics and/or other physical theories. Prerequisite: CA I or permission. (Cross-listed as PL 314 and CA 314).

PL 340 Philosophy of Art 4 **Fall** **FH**

A study of the main theories about art in the western tradition, with particular attention to classical views as well as modernist conceptions and post-modern critical reactions. Prerequisites: AR 110 and one 300-level Art History course, or permission.

PHYSICS (PC)

	Office
Assistant Professor Borgardt	BSC/P226
Professor Siems (Chair)	BSC/P230
Associate Professor White, J.D.	BSC/P232

Background Information:

Any quantitative study of those aspects of the universe which can be sensed or measured ultimately will require some use of physics. Physics deals with the fundamental quantities of space and time as well as charge and other basic quantifiable aspects of our world. It discovers relationships governing the transfer of energy between material substances. It deals with the structure of matter from the smallest quarks to the largest clusters of galaxies. The study therefore becomes fundamental to a deeper understanding of subjects such as chemistry, biology, astronomy, and engineering. A permanent example of using physics knowledge and skills to further humankind's understanding of nature is 1970 graduate, Dr. William Phillips, who shared the 1997 Nobel Prize in Physics with two other researchers, for cooling and trapping atoms with laser light.

Special programs, facilities, or equipment:

- Observatory with and 8-inch and 12-inch computerized telescope, as well as electronic imaging capabilities. Also has a 4-meter diameter radio telescope
- Intermediate laboratory provides experiments which use equipment such as a scanning tunneling microscope, a spectrograph, lasers, and a multichannel analyzer
- Computers provide interfacing with experimental equipment
- Society of Physics Students (SPS) chapter named outstanding chapter in their zone (1998-99)

Programs of Emphasis:

- Physics
- Pre-Engineering
- Engineering Physics
- Physics/Secondary Education

Student Designed Programs of Emphasis:

- Physics/Computer Science
- Physics/Mathematics
- Physics/Philosophy

Secondary Emphasis:

- Requirements: 18 credits in physics classes and laboratories, two classes at the 300-400 level

Internship/Research Experiences:

- Oak Ridge National Laboratory
- Thomas Jefferson National Accelerator Facility in Virginia
- Research at Baylor University
- Research at Cornell University

PC 110 Conceptual Physics 3 Alternate Years N
Spring

A study of the phenomena of the physical world without the use of college level mathematics. Lectures are illustrated by numerous demonstrations. Note: may not be substituted for General Physics or Introductory Physics by students with science programs.

PC 120 Astronomy 3 Fall N

An exploration of how man's understanding of the universe has evolved and is still developing. Early astronomy, planets, sun, stellar evolution, and galaxies are covered with emphasis on man's confrontation with the unknown. The present-day fascination with pulsars, quasars, and black holes is discussed.

PC 190 Biological Physics 3 Alternate Years N
Spring QM

An introduction to physics with emphasis on mechanics, electricity, and optics. Many applications will be from biological areas. Note: a special fee is assessed. Corequisite: PC 191.

PC 191 Biological Physics Laboratory 1 Alternate Years N
Spring

An introductory laboratory experience designed to accompany PC 190. The individual experiments on mechanics, fluids, wave motion, electricity, magnetism, and optics allow students to explore further topics presented in lecture. Note: a special fee is assessed. Corequisite: PC 190.

PC 200 General Physics I 3 Fall N
QM

An introduction to the basic principles of mechanics (including periodic motion, fluid statics and dynamics), heat and thermodynamics, molecular theory, and wave motion (including acoustics). Note: a working knowledge of algebra and trigonometry is required. Corequisite: PC 206.

PC 201 General Physics II 3 Spring N
QM

An introduction to basic principles of electricity, magnetism, electromagnetic waves, and optics. Additional topics may include atoms and molecules, nuclear physics, relativity, and solid state physics. Note: a working knowledge of algebra and trigonometry is required. Corequisite: PC 207. Prerequisite: PC 200.

PC 202 Introductory Physics I 3 Fall N
QM

An introduction to the basic principles of mechanics (including periodic motion, fluid statics and dynamics), heat and thermodynamics, molecular theory, and wave motion (including acoustics). Note: requires more mathematical background than PC 200. Corequisite: PC 206 and MA 130.

PC 203 Introductory Physics II 3 Spring N
QM

An introduction to basic principles of electricity, magnetism, electromagnetic waves, and optics. Additional topics may include atoms and molecules, nuclear physics, relativity, and solid state physics. Note: requires more mathematical background than PC 201. Corequisite: PC 207. Prerequisite: PC 202.

PC 206 Physics Laboratory I 1 Fall N

An introductory laboratory experience designed to accompany PC 200 and PC 202. The individual experiments on mechanics, fluids, and wave motion allow students to explore further topics presented in lecture. Note: a special fee is assessed. Corequisite: PC 202.

PC 207 Physics Laboratory II 1 Spring N

An introductory laboratory experience designed to accompany PC 201 and PC 203. The individual experiments on electricity, magnetism, optics, and modern physics to explore further topics presented in lecture. Note: a special fee is assessed. Corequisite: PC 203.

PC 209 Electronics 3 Spring N

An introduction to the theory and application of analog and digital electronics, starting with basic AC and DC circuits. The unit explains the principles of operation of the power supply, amplifier, oscillator, logic circuits, and other circuits. An associated laboratory allows construction of and measurement on the circuits under consideration. Note: a special fee is assessed.

PC 289 Physics Seminar I 1 Spring N

Seminar series, required of all Physics/Physics-Engineering POE's in the Freshman year, consisting of research seminars given by invited speakers and members of the Department, both faculty and students. Descriptions of independent research, internship and study abroad opportunities as well as reports by students and faculty on experiences in these programs will be presented. Student's academic path to becoming a physicist or engineer will also be discussed, as well as subsequent career possibilities. Graded S (satisfactory) or U (unsatisfactory).

PC 300 Modern Physics 4 Fall N CW

The origin and progress of physics in the early 20th century, including special relativity theory and quantum theory with applications in atomic and molecular science. Other topics may include solid state physics, nuclear physics, and elementary particles. Includes laboratory work. Note: a special fee is assessed. Prerequisites: MA 230 and PC 203. Corequisite MA 235.

PC 301 Theoretical Modern Physics 3 Fall N

Designed to accommodate students with Chemistry, Mathematics, and life science POEs. This course is the same as PC 300, Modern Physics, excluding the laboratory component. Prerequisites: MA 230 and PC 203. Corequisite: MA 235.

PC 307 Advanced Physics Laboratory 3 Fall or Spring N CW

Provides laboratory projects at the intermediate level. A series of projects is offered which best meet the educational needs of the student. Note: may be repeated for up to a total of 9 hours of credit. A special fee is assessed. Prerequisite: PC 300.

PL/PC 314 The Philosophy of Physical Sciences 3 Some Years NH Spring CW

Explores philosophical issues in the physical sciences, emphasizing problems of space, time, motion, and difficulties concerning scientific explanation, causation, and laws of nature. Topics may include the nature of geometrical knowledge; philosophical impact of relativity theory; absolute versus relative conceptions of space and time; problems of measurement, experimentation, and testing hypothesis; and philosophical issues raised by quantum mechanics and/or other physical theories. Prerequisite: CA 1 or permission. (Cross-listed as PL 314 and CA 314).

PC 320 Engineering Mechanics I: Statics 3 Fall N

A problem-solving approach to applied mechanics involving equilibrium of co-planar and non-planar force systems, analysis of frames and trusses, friction, centroids, and moments of inertia. Prerequisite: PC 202.

PC 321 Engineering Mechanics II: Dynamics 3 Spring N

A problem-solving approach to applied mechanics involving the kinematics and kinetics of particles and rigid bodies. Techniques involving Newton's laws, work-energy, and impulse-momentum are presented and used extensively. Prerequisite: PC 320.

PC 330 Nuclear Physics 3 Spring N CW

Presents nuclear concepts including nomenclature, structure, forces, reactions, and models. Introductory nuclear reactor physics, elementary particles, and quantum mechanics are covered as necessary. Prerequisite: PC 300.

PC 340 Mathematical Methods in Physics 3 Fall N

An introduction to the mathematics used in advanced physical science courses. The emphasis is on early exposure to mathematical techniques and their uses rather than on rigorous derivation. The course includes applications utilizing symbolic algebra software packages for computers. Prerequisites: PC 203 and MA 230.

PC 350 Thermodynamics 3 Some Years N Spring

An intermediate level course treating the concept of temperature and its measurement, the concepts of heat and work, the laws of thermodynamics, applications of these concepts to physical systems, the elements of statistical mechanics, and as many topics of current concern as time allows. Prerequisite: PC 300.

PC 389 Physics Seminar II 1 Spring N
Seminar series, required of all sophomore, junior and senior Physics/Physics-Engineering POE's, consisting of research seminars given by invited speakers and members of the Department, both faculty and students. Discussions regarding specific career opportunities and preparation for graduate studies will also be an integral part of the seminar series. Repeating students are expected to present a research seminar. Note: may be repeated for up to a total of 3 hours of credit. Prerequisites: PC 289.

PC 399 Special Topics 3 Fall or Spring N
Intermediate to advanced level treatment of a variety of areas within physics such as solid state physics and general relativity. Note: abbreviated ST: (title); students may take each ST: course for credit.

PC 402 Quantum Mechanics 3 Spring N
A rigorous introduction to the fundamentals of quantum mechanics, including topics such as the Schrödinger Equation, the "particle-in-a-box", the harmonic oscillator, angular momentum, the hydrogen atom, theorems of quantum mechanics, and electron spin. Time permitting, some attention may be given to philosophical issues arising out of the theory. Prerequisites: (MA 235 or PC 340) and (CH 305 or PC 300).

PC 410 Mechanics 4 Alternate Years N
Fall
A study of classical mechanics including Newtonian, Lagrangian, and Hamiltonian approaches. Emphasis is placed on developing the student's ability to analyze physical problems involving particles, systems of particles, and rigid bodies. Insight is provided into a variety of techniques for solving such problems. Prerequisites: PC 203 and PC 340 or MA335.

PC 420 Electricity & Magnetism I 3 Alternate Years N
Fall
A study of electromagnetic phenomena, including electrostatics, electric fields in matter, magnetostatics, magnetic fields in matter, and an introduction to electrodynamics (including and introduction to Maxwell's equations). Corequisite: PC 340. Prerequisite: PC 203.

PC 421 Electricity & Magnetism II 3 Alternate Years N
Spring
A continuation of PC 420, including a study of topics such as conservation laws in electromagnetism, electromagnetic waves potentials and fields, radiation, and an introduction to relativistic electrodynamics. Prerequisite: PC 420.

PC 430 Optics 3 Some Years N
Spring
A study of the nature of electromagnetic radiation, including topics such as geometric optics, interference and diffraction phenomena, quantum optics, the interaction of light with matter, and laser physics. Prerequisite: PC 300.

PC 450 Physics Research I 1-4 Fall or Spring N
CW
An opportunity for the student to do an independent research project under the guidance of a faculty member. Note: listed as Research: (title). Prerequisite: permission.

PC 451 Physics Research II 1-4 Fall or Spring N
An opportunity for students to do a more advanced independent research project under the guidance of a faculty member. Prerequisite: permission.

PC 490 Physics Internship 2-9 Fall & Spring N
(See chapter, "Special Programs" under internships.) Note: may be repeated up to a total of 9 hours of credit. Corequisite: PC 495. Prerequisite: permission.

PC 495 Internship Research/Seminar 2-6 Fall & Spring N
Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: PC 490. Prerequisite: permission.

POLITICS (PS)

	Office
Associate Professor Barlow (Chair)	Good 319
Assistant Professor Hague	Good 317
Assistant Professor Nagengast	Good 316

Background Information:

Politics is among the oldest of the Western liberal arts. It traces its origins to Greek city-states of the classical period, and specifically to the city of Athens and the figure of Socrates. Even today, Socrates' tragic confrontation with the authority of the city informs Western ideas of individualism and community. Politics is everywhere in human life, and this department takes a comprehensive view of its subject matter. Juniata's Politics Department provides professional training within a liberal arts framework. We prepare students for careers in government, business, journalism, and many other fields as well as graduate school or law school.

Special programs, facilities, or equipment:

- Study abroad program in affiliation with Masaryk University in Bruno, Czech Republic
- Washington Semester Program
- Washington Center Program

Programs of Emphasis:

- Politics

Student Designed Programs of Emphasis:

- History and Politics
- Environmental Science and Politics
- Politics and Literature
- Peace & Conflict Studies/Politics
- Criminal Justice/American Politics

Secondary Emphasis:

- Requirements: At least 18 credits in Politics (PS101 and PS102 required, along with four additional courses 200 level or above).

Internship/Research Experiences:

- Federal Trade Commission
- U.S. Embassy (London, England)
- Chesapeake Bay Foundation
- Environmental Protection Agency

PS 101 Introduction to American Government 3 **Spring** S
An introduction to the theory and practice of democratic politics. The course surveys the underlying structure of American politics its economic, cultural, and legal foundations and the daily practice of politics, e.g. groups, parties, and the mass media. Students are asked to develop an account of democratic politics, and to assess the principal features of political life in the United States according to the standards they have framed.

PS 102 Introduction to International Politics 3 **Fall** SI
Analyzes the principles and practice of international relations and the foreign policy of the United States, political, diplomatic, military and economic.

PS 122 Politics in Literature 3 Spring SH CW

An introduction to the themes and analytical framework of political philosophy through a careful reading of works of literature. Such political themes as the relation of the individual to society, gender issues, and the legitimation of authority will be addressed.

PS 132 Public Interest Groups and Political Participation 3 Spring S CW

This course offers students a new perspective on politics: the role of the individual or public interest groups in shaping public discourse and the political agenda, and in determining public policy priorities. In many areas of public policy, individuals and those advocating public interest have been successful in shaping legislation and altering the way in which both citizens and political officials view the purpose of government. This course will focus on examples from environmental interest groups and environmental policy, as well as other areas such as health care and consumer protection.

PS 214 Statistics for Social Science 4 Fall S QS

(see ND.SS 214)

PS 215 Social Science Research Methods 4 Spring S
(see ND.SS 215)

PS 216 State and Local Government 3 Spring S CW

Examines the organization, operation, and problems of American state and urban governments. Emphasis is placed on the services these governments provide, the conflicts they may manage, and the major economic and political trends affecting America's state and local governments. Students select and study a community throughout the semester. Prerequisite: PS 101.

PS 218 Public Policy and Administration 3 Spring S CW

An introduction to the study of public policy and its administration. The course explores the ways in which power, knowledge, and institutions shape the adoption and evolution of public policies in western democracies. Focusing on various policy areas, the course also surveys the public bureaucracies that administer these policies, examining what government agencies do and why they do it, and assesses alternatives to public bureaucracies. Prerequisite: PS 101.

PS 221 American Political Thought 3 Fall S CW

Reviews the development of political thought in America from the pre-Revolutionary period to the present. Students read selected primary sources including the Federalist Papers, Lincoln's speeches, and the writings of Frederick Douglass and Martin Luther King, Jr. Special attention is given to the tension between equality and individual liberty in our democratic system. Note: available by permission. Prerequisite: PS 101.

PS 222 Western Political Thought 3 Spring S CW

Surveys selected works of political philosophers from Plato to Nietzsche. The course will focus on enduring questions of political thought including the nature of the good life and the best regime, the relationship between freedom and authority, and the tension between liberty and equality. Prerequisite: PS 101, PS 102, or PS 122.

PS 241 European Politics 3 Spring SI CW

Examines the modern history, political culture, institutions, and policies of the major West European states. Britain, France, Germany, and the European Communities are compared along with selected other countries. The major problems confronting these nations are highlighted. Note: available by permission. Prerequisite: PS 102.

PS 242 Politics of Developing Nations 3 Fall SI

Draws on an analytical framework and provides an in-depth study of political, economic, and social development in non-Western societies. Selected countries or groups of countries from Asia, the Middle East, and Africa are used as case studies. Note: available by permission. Prerequisite: PS 102.

PS 243 United States Foreign Policy 3 **Spring** S CW

Examines U.S. Foreign Policy from the Monroe Doctrine to the New World Order. Special emphasis is given to the tension between isolationism and globalism in this century. Focus on contemporary issues such as: the relationship with the UN, the U.S. as a global policeman, the role of human rights as an American priority. Prerequisite: PS 102.

PS 311 Constitutional Law I: The Federal System 3 **Fall** S CW

Examines the three branches of the national government and the relationship between their constitutional powers and the limitations on those powers as interpreted by the Supreme Court. Special attention is given to the areas of delegated and concurrent powers. The operation of the Supreme Court and the Federal court system is also reviewed. Note: available by permission. Prerequisite: PS 101.

PS 312 Constitutional Law II: Civil Rights & Liberties 3 **Spring** S CW

Examines citizens' rights and liberties which the Constitution protects against infringement by the government. Those freedoms enumerated in the Bill of Rights are reviewed as well as the right to privacy, due process, and equal protection. Note: students are advised to first take Constitutional Law I; available by permission. Prerequisite: PS 101.

PS 313 Congress and Presidency 3 **Fall** S CW

Examines the intellectual and constitutional foundations of Congress and the Presidency, and the evolution of their powers and responsibilities. The course also explores how, through cooperation and confrontation, the institutions make decisions about war and peace, spending, and taxation. Prerequisite: PS 101.

PS 318 Parties, Elections and Campaigns 3 **Even Years Fall** S CW

Examines the role political parties and elections play in democratic theory and practice in the U. S. Topics include party systems in the U. S., history, party organization, comparisons with parties in other countries, electoral competition, and elite-mass linkages. Contemporary issues such as campaign finance, campaign strategy, and the role of the mass media are also explored. Prerequisite: PS 101.

PS 320 Topics in Law and Philosophy 3 **Fall** S CW

Examines specific topics in the areas of political philosophy and law. Topics will include "Foundations of American Constitutionalism," "African-American Social and Political Thought," and "Shakespeare's Politics." Students may take each course for credit.

PS 323 The Legislative Process 3 **Fall** S CW

A study of the State Legislature and the Legislative Process. Students will examine the State Legislature as an institution in all of its aspects and those factors which comprise and affect the legislative process. The course requires the written analysis of actual legislation and the drafting of legislative proposals. Prerequisite: PS 101.

PS 330 Topics in Public Policy 3 **Fall** S CW

Examines the formation and implementation of public policy by an in-depth focus on a single policy area. The course will investigate a particular policy area for the semester, such as environmental policy, health care policy, immigration policy, and welfare policy. Policy study will include analysis of interest groups, public opinion, congressional committees, and federal agencies. Research and analytic exercises will be emphasized. Prerequisite: PS 101; PS 218 recommended.

PS 332 International Law and Human Rights 3 **Odd Years Fall** SI CW

A study of the historical evolution of International Law and its role and importance in the international system. In addition, the course will examine the issue of human rights, and the political factors that affect the extent to which human rights can be defined and protected by the international community. Note: available by permission. Prerequisite: PS 102. (A Peace and Conflict Studies course).

PS 333 Theories of International Politics 3 Fall SI CW

An examination of various theories and approaches to international politics within the past and present contexts of American, Eurasian, and African continents. Special attention is given to theories of war and warfare (from Plato to NATO) and the religious, ideological, geographical, political, and economic determinants of war. Prerequisite: PS 102.

PS 340 Topics in International Politics 3 Spring SI CW

Examines international politics in light of a specific topic or issue. The topics include themes such as: Global Environmental Politics, Nationalism, Competing World Ideologies.

PS 348 Contemporary Latin America 3 Spring SI CW

(see HS 348).

PS 399 Special Topics 3 Fall or Spring S CW

Offers supplements to the regular departmental program, exploring topics and areas not regularly scheduled. Examples include "Religious Revivalism in the Third World,", "Race, Religion, and Gender in American Politics," and "African-American Political Thought." Note: abbreviate ST: (title); students may take each ST: course for credit. Prerequisite: permission.

PS 490 Legal & Public Affairs Internship 2-9 Fall & Spring S

An opportunity to apply concepts and theories learned in class and readings to a practical situation. Selected students work with chief administrative officers in State College and Huntingdon, police departments, environmental departments, legal offices, or in the Court House. Note: may be repeated up to a total of 9 hours credit. Corequisite: PS 495. Prerequisite: permission.

PS 491 Washington Internship 2-9 Fall & Spring S

(see the chapter, "Special Programs" under "Internships." Corequisite: PS 495. Prerequisite: permission.

PS 492 Harrisburg Legislative Internship 2-9 Spring S

A unique opportunity to experience the legislative process. Placements are made to the research staffs of various committees (e.g. Banking and Commerce, Education, Judiciary, Local Government, and Urban Affairs) of the Pennsylvania House of Representatives. Committees are selected on the basis of student interests and needs in the Legislature. Corequisite: PS 495. Prerequisite: permission.

PS 495 Internship Research/Seminar 2-6 Fall & Spring S CW

Required of all students holding internships. The emphasis is on readings and discussions of materials relevant to the internship experience, e.g., professional behavior, ethical conduct, confidentiality, etc. Students produce a major research paper on a topic selected by the student in conjunction with the internship supervisor and the course instructor. Note: may be repeated up to a total of 6 hours credit. Corequisite: PS 490 or PS 491 or PS 492. Prerequisite: permission.

PS 497 Honors Research I 3 Fall S CW

Designed to offer exceptional students the opportunity to engage in an extensive undergraduate thesis or research project. Selected students will be invited by the faculty of the Department to propose a project of special interest to the students; working closely with at least one member of the department, students will develop and complete the research for the project in the first semester and present the results as a publishable paper in the second. Available by permission.

PS 498 Honors Research II 3 Spring S CW

Designed to offer exceptional students the opportunity to complete the research paper started in PS 497. Prerequisite: PS 497.

PS 499 Senior Seminar 3 Spring S

Intended as a capstone experience in the discipline and designed to engage students in their final year in the comprehensive study of a major question or issue confronting the discipline of political science. Prerequisites: PS 101 and PS 102 and PS 122, senior standing, and three additional Political Science courses or departmental permission.

PSYCHOLOGY (PY)

	Office
Professor Drews (Chair)	Good 406
Professor McLaughlin	Good 404
Assistant Professor Widman	Good 420
Professor Wright	Good 307

Background Information:

The department's purpose is to provide exposure to the content, methodology, and theoretical developments associated with the "study of behavior." The department is oriented toward the empirical, scientific study of both human and non-human organisms. Courses in psychology are intended both for students desiring a general background and for those considering graduate work in the area. The offerings deal with behavior at all levels of analysis, from the smallest unit to the largest units of psychology. The department supports student research and encourages interdisciplinary study and internship experiences.

Special programs, facilities, or equipment:

- Behavioral research laboratory
- Computer lab for psychology
- Discipline specific software for psychological research

Programs of Emphasis:

- Psychology

Student Designed Programs of Emphasis:

- Psychology/Education
- Psychology/Social Work
- Psychology/Business
- Psychology/Biology
- Psychology/Art
- Psychology/Math
- Psychology/Communications
- Adolescent Behavioral Services
- Studies in Human Behavior
- Group and Individual Behavior

Secondary Emphasis:

- Requirements: 15-18 credits hours of psychology chosen in consultation with advisor in psychology

Internship/Research Experiences:

- Outpatient Clinics
- Developmental services
- Youth camps
- Correctional institutes
- Hospice
- High schools
- Institutional research
- Behavioral Health Services

PY 101 Introduction to Psychology 3 Fall & Spring S
An overview of the content and methodology in the field. Topics such as the history of psychology, physiological psychology, learning and memory, perception, motivation, child development, personality, and social foundations are considered.

PY 201 Developmental Psychology 3 Fall S
The discussion of life span development in terms of basic processes, theories, and evolutionary significance. Emphasis is on structure-function interrelationships which result in behavior. Prerequisite: PY 101.

PY 202 Personality 3 Spring S
A consideration of representative approaches to the study of human personality, beginning with standard theoretical approaches and their applications. This is followed by a consideration of selected topics within the field of personality, e.g. aggression, sexuality, dependency, and competence. Prerequisite: PY 101.

PY 203 Behavior Pathology 3 Fall S
A brief consideration is given to the historical approaches to mental illness, followed by a consideration of present day classification, diagnostic measures, and therapy. Emphasis throughout is upon experimental data as applied to the various disorders. Prerequisite: PY 101.

PY 205 Social Psychology 3 Spring S
The study of human interaction and interpersonal relationships, including selected areas of current research and theory such as social perception, interpersonal communication, attitude formation and change, conformity, aggression, and interpersonal attraction. Prerequisite: PY 101.

PY 207 Human Sexuality 3 Spring S
Examines human sexuality from psychological and cultural perspectives. Topics include the physiology of sexual functions, conception and contraception, sexual behavior through the life span, sexual intercourse, sex and society, sex and the law, and sex and morality. Prerequisite: PY 101.

PY 208 Applied Psychology: War and Peace 3 Spring S
Designed to serve both psychology students seeking to clarify career options and students interested in applications of psychology to issues of war and peace. Selected specialties within psychology are surveyed and topics such as enemy images, conflict escalation, decision making and negotiation are explored from a psychological perspective. Topics may vary from year to year. Prerequisite: PY 101 or PACS 105.

PY 214 Statistics for Social Science 4 Fall & Spring S QS
(see ND.SS 214)

PY 215 Social Science Research Methods 4 Spring S
(see ND.SS 215)

PY 301 Sensation & Perception 3 Spring S
Stresses methodology and experimentation.The content covers both the classical and modern approaches to sensation and perception. Prerequisite: PY 101 or permission.

PY 303 Learning & Conditioning 3 Fall S
Explores the issue of how we are changed by experience, using primarily a behaviorist perspective, applied to animal and human data. Both theory and applied implications of theory will be considered. Prerequisite: PY 101.

PY 304 Human Memory 3 Spring S
Explores an array of issues in human memory, primarily from a cognitive/information processing point of view. Major emphasis is on using research data to formulate answers to both theoretical and applied questions. Prerequisite: PY 101.

PY 305 Testing & Measurement 3 Alternate Years Fall S
Emphasizes the theory, design, and evaluation of psychological tests. Special attention is paid to topics such as validity and reliability, practical issues involved in administration, scoring, and interpreting selected psychological tests. Prerequisite: PY 101.

PY 307 Motivation 3 Spring S
Presents major concepts used in trying to create a coherent theory of motivation, aiming to provide a framework within which research findings may be classified and evaluated. Prerequisite: PY 101.

PY 309 Experimental Psychology Laboratory 4 Spring S CW

Examines issues in research design. A variety of topics are used to give students experience with the design and execution of experiments as well as with the interpretation of research findings and the written presentation of research. Prerequisites: PY 101 and ND.SS 214.

PY 310 Counseling Theories & Techniques 3 Fall S

Theoretical models of counseling and psychotherapy are examined with particular emphasis on major approaches such as behavioral, psychodynamic, and existential humanistic. Legal and ethical issues are also included. Prerequisite: PY 101.

PY 337 Comparative and Evolutionary Psychology 3 Fall NS

Examines the continuity of behavioral and psychological mechanisms between animals suggested by evolutionary theory. Special attention is paid to the comparison between human and nonhuman animals on both traditionally human and animal traits. Prerequisite: PY 101.

PY 338 Biopsychology 3 Spring NS

Focuses on neurobiology and neuroanatomy as they relate to sensory processes, motivation, reinforcement, learning, and memory. (See BI 338). Prerequisites: PY 101 or BI 111 or BI 113 or permission.

PY 340 Research in Psychology 2 Spring & Fall S CW

Allows students to become involved in an ongoing research program. Students will be required to read primary literature from the specific field of investigation and become involved in the execution of an ongoing experiement. Students will be expected to perform the activities relevant to the experiment, assist in the analysis of the data, and write an APA style paper based on the results of the experiment. Prerequisites: PY 101 and permission. See 340 for description of 341.

PY 399 Special Topics 3 Fall or Spring S

Occasional offerings in which a group of students and a professor explore an area of specialized interest in a seminar format. Recent offerings have been: "Applied Psychology: Issues of War & Peace" and "Psychological Theory." Note: abbreviated ST: (title); students may take each ST: course for credit.

PY 405 Personal Relationships 3 Spring S CW

An overview of the research literature on the topics of friendship and interpersonal relationships. Topics include: 1) the attraction paradigm; 2) the acquaintance process: 3) growth in relationships (social penetration, filter theory, self disclosure, and mutuality); 4) loving and liking; 5) friendships across the life span; 6) issues in friendship (emotion, power, gender, and commitment); 7) relationships in disorder: and 8) friendship and health. Prerequisites: PY 202 or PY 205 or permission.

PY 406 Advanced Statistics for Psychology 3 Alternate Years Fall S Q

An examination of statistics useful in social science research that builds on the base provided by Statistics for Social Science. Techniques that are examined include factorial analysis of variance and within subject experimental designs. Students are introduced to SPSS. Prerequisite: ND.SS 214.

PY 450 Senior Research in Psychology 2-4 Fall S CW

Emphasizes the design and execution of an individual research project on a topic chosen in consultation with faculty. The student is expected to become conversant with the relevant primary literature, design and conduct the research, perform appropriate statistical analysis, and present a final paper in APA style. May be taken multiple times for credit. Prerequisites: (PY 301 or PY 309) and permission.

PY 451 Senior Research in Psychology 2-4 Spring S CW

(see PY 450).

PY 490 Psychology Internship 2-9 Fall & Spring S

(see the chapter, Special Programs under Internships.) Corequisite: PY 495. Prerequisite: permission.

PY 495 Internship Research/Seminar 2-6 Fall & Spring S

Requires student to reflect on the internship experience and/or pursue research related to the placement. Corequisite: PY 490. Prerequisite: permission.

RELIGION (RL)

Professor Nieto (Chair) (Geiger Professor) — *Office* IHB 102
Visiting Professor Towne (J. Omar Good Professor) — IHB 201

Background Information:

The department provides a nondepartmental approach to the study of religion within the humanities and offers courses for credit both under the Department of Religion and/or History. The objective of religious studies is to acquaint students with the sources, history, nature experience and relevance of religious thought and institutions. The department offers courses, which may serve as a foundation for those who wish to take courses for their own enrichment or toward their Program of Emphasis. The Department participates in the Peace and Conflict Studies program.

Special programs, facilities, or equipment:

- The J. Omar Good Visiting Professor of Evangelical Christianity

Programs of Emphasis:

- Secondary emphasis only

Student Designed Programs of Emphasis:

- History/Religion
- Psychology /Religion
- Communication/Religion
- Biology/Religion
- Philosophy/Religion
- Educational Religious Studies

Internship/Research Experiences:

- Experience in the Campus Ministry Office
- Research on role of Campus Ministry at Juniata

RL 102 Ancient Judeo-Christian Heritage — 3 — Fall — H
(see HS 102)

RL 117 Rebellion, Religion & Pacifism — 3 — Fall — H CW
(see HS 117)

RL 202 Old Testament as History & Literature — 3 — Fall — H
Treats the Old Testament as an historical document reflecting both the expression of the Hebrew faith in God and the literature of the Hebrew nation. The literacy forms and formation along with the Old Testament's value and meaning as the living faith of Israel are analyzed.

RL 203 New Testament as History & Literature — 3 — Spring — H
Treats the New Testament as an historical document reflecting both the expression as a new faith as a witness to Christ and a diverse literary work. The literary forms, values and meanings of New Testament faith are analyzed.

RL 246 Modern Culture & Religion — 3 — Spring — H
Studies religious themes in modern culture as reflected in literature, philosophy, ethics, science, religion, etc. Focus is on the most recent issues of religion and culture. (Alternative to GE 401 (SVS))

RL 247 History of Christian Thought 3 Spring H CW
(see HS 247)

RL 260 Genesis and Evolution: Integration 3 Fall & Spring H
This course will begin with a discussion of critical thinking including the qualities of intellectual humility, honesty, and courage. Using those skills we will integrate the record in the rocks with the record in the scriptures and show how the ancient writings have meaning for modern Christians who study science. An overview of the history of evolutionary theory and the church's response as well as the main tenets of creationism and evolution will be covered. An introduction to the discipline of higher biblical criticism is included. The overarching aim of the course is integration of these disciplines and a resulting contribution to Christian unity.

RL 261 Christianity and Science: A Historic Overview 3 Spring H
This course will begin with a discussion of critical thinking. Using those skills we will begin with the Greeks and survey the interface of Christianity with science culminating with the impact Darwinian evolution has had on the Christian church in the twentieth century.

RL 262 Religion and the History of Writing 3 Fall FH CW

This course will give an overview of how various religions and writing have impacted each other. Cuneiform writing, pictographs, the development and dispersal of alphabet, the evolution of several scripts, pigments, writing media, and the role of the scribe will be included as well as illuminated manuscripts and the significance of the printing press on religious development. The course will end with beginning practical instruction in italic and block letter calligraphic technique.

RL 303 Religion and Psychology in Modern History 3 Spring H
Approaches religion from a historical and psychological perspective based on readings from James, Freud, Jung and others. It raises critical and methodological issues.

RL 330 Mystical Experience: East & West 3 Spring HI
A study of the phenomena of universal mysticism and religious experience in both Christian and non-Christian religions. Focus is on the analysis of and differences between mystical experience, religious experience and drug experience.

RL 346 Oriental Religious Heritage 3 Fall HI
(see HS 346)

SOCIOLOGY, ANTHROPOLOGY, SOCIAL WORK, AND CRIMINAL JUSTICE (SO, SW)

	Office
Professor Radis (Chair)	Good 408
Professor Reilly	Good 403
Professor Stroman	Good 414
Assistant Professor Wagoner	Good 410
Assistant Professor Wiinamaki	Good 412

Background Information:

Sociology is the systematic study of human interaction. The discipline uses both descriptive and analytical methods and it differs from other social sciences by its focus on society. Anthropology, a much more broadly based discipline, is concerned with observation, description, and analysis of the physical, cultural, and ecological processes which define the human species. Criminal Justice offers practical and theoretical knowledge of the processes of the justice system. Accredited by the Council on Social Work Education, the Dorothy Baker Johnson and Raymond R. Day Social Work Program is designed primarily to prepare students for entry-level generalist social work practice. The department's offerings may be combined to meet four kinds of academic needs: the broad study of societies and cultures and their contemporary problems for the liberally-educated; a theoretical and conceptual orientation for pre-professional sociologists, anthropologists, and criminal justice students bound for graduate school; rigorous training and field experience in social work for those interested in this career; and internships and the accompanying research seminars for senior criminal justice students.

Special programs, facilities, or equipment:

- The Human Interaction Lab

Programs of Emphasis:

- Anthropology
- Social Work
- Sociology
- Criminal Justice

Student Designed Programs of Emphasis:

- Biological Anthropology
- Anthropology/Religion
- Criminal Justice and Spanish
- Criminal Justice/Communications
- Psychology/Criminal Justice
- Peace and Conflict Studies/Sociology

Secondary Emphasis:

- Anthropology Requirements: 18 credits, 12 from the core list and choice of 6 additional.

- Criminal Justice Requirements: 18 credits in Criminal Justice courses.
- Sociology Requirements: 26 credits of designated Sociology courses.

Internship/Research Experiences:

- Bighorn National Forest, Sheridan, WY
- JC Blair Hospital
- Mainstream Counseling
- State Correctional Institute-Huntingdon
- Huntingdon Borough Police Department
- Mifflin County Probation Office

SO 101 Introduction to Sociology 3 Fall & Spring S
The study of human social groups and the social processes that lead to both structural and cultural integration and differentiation primarily within contemporary American society.

SO 104 Introduction to International Studies 3 Spring SI
(see IS 104) CW

SO 151 Introduction to Anthropology 3 Fall & Spring SI
Dedicated to the proposition that there are many ways of being human, all of which are adaptations to particular sets of conditions. Trends and highlights of the human experience, both physical and cultural, are studied from a cultural perspective.

SO 203 Minorities 3 Spring S
A study of the social processes that lead to the formation, alteration, and activities of racial, ethnic, and sexual minorities in human societies. Prerequisite: SO 101 or SO 151.

SO 204 The American Family 3 Spring S
Examines the structure and functions of the family as a vital and adaptive social institution. Particular emphasis is placed on emerging trends within the family including dual careers, nontraditional families, divorce, and conflict management. Prerequisite: SO 101 or SO 151.

SO 214 Statistics for Social Science 4 Fall S
(see ND.SS 214) QS

SO 215 Social Science Research Methods 4 Spring S
(see ND.SS 215)

SW 221 The Life Cycle 3 Fall S
An introduction to life span development from conception, through birth, infancy, childhood, adolescence, and the various stages of adulthood. Perspectives are provided on the physical, psychological, and social aspects of development over time. Human diversity as well as similarities in growth and development are examined. Prerequisite: SO 101 or SO 151 or PY 101.

SW 230 Introduction to Social Work Practice 4 Spring S
Examines the generalist skills, knowledge, and values of the social work profession. Interviewing, communication skills, the development of a helping relationship, and problem solving strategies are emphasized. Prerequisites: (SO 101 or SO 151) and SW 231 or permission.

SW 231 Social Problems & Social Welfare 3 Fall S
Explores persistent social problems such as poverty, inequality and oppression, unemployment, family violence, and substance abuse using historical, philosophical, and social science perspectives. The development of social policies and services as institutional responses to these problems are described and analyzed. Prerequisite: SO 101 or SO 151 or PY 101.

SO 234 Constructing Race and Ethnicity 3 Alternate Years S
Fall

A cross-cultural study of social and cultural processes involved in the creation and maintenance of the social categories of race and ethnicity. Examines anthropological, historical, and legal texts as well as materials from popular culture. (A CAII course)

SO 240 Mental & Physical Handicaps 3 Fall S
A study of mental illness, mental retardation, and physical handicaps in terms of origins, social relations, and treatment. Prerequisite: SO 101 or SO 151.

SO 241 Child & Family Services 3 Alternate Years S
Fall CW

An overview of child and family services policies and practice. Primary emphasis is on the dynamic interaction between the child, family, community and social service delivery system. Service areas are explored including abuse and neglect, adoption, foster care, status offenders, and special needs of children and families. Prerequisite: SO 101 or SO 151.

SO 242 Aging & Society 3 Alternate Years S
Spring

Analyzes the physical, psychological, and social processes involved in aging and the societal response to aging. Prerequisite: SO 101 or SO 151.

SO 243 Death & Dying 3 Spring S
An introduction to the social, psychological, and cultural aspects of death and dying. The course is designed to lessen misconceptions concerning death and dying, to enable individuals to deal constructively with feelings about personal death and the death of meaningful others, and to help people cope more effectively with grief and bereavement.

SO 244 Drugs & Society 3 Fall S
CW

The course explores the history of substance abuse, models of addiction, physiological effects of commonly abused substances, and an examination of treatment effectiveness. Some of the programs that will be examined include the 12-step programs, motivational enhancement therapy, and cognitive-behavioral therapy.

SO 254 Archaeology and Human Prehistory 3 Fall SI
Through readings, lectures, films, and discussions about a variety of archaeological sites, from Alaska to Zimbabwe, students are introduced to our earliest ancestors, to the diversity of prehistoric cultures, and to the origins of Western civilization.

SO 260 Introduction to Criminal Justice 3 Fall S
CW

The nature of crime, the history of criminal justice, and the processes of the modern justice system are the main focal points of this course. This course is interactive, and students will present papers of topical interest to the class. Current court cases will be examined and discussed in class, as well as justice-themed news stories. Guest speakers from the criminal justice field will offer their perspectives on pertinent issues. Prerequisite: SO 101, SO 151, or PY 101.

SO 300 The Anthropology of War and Peace 3 Alternate Years SI
Fall

A study of the incidence and nature of cooperation, competition, and conflict in human cultures. Evidence will be drawn from archaeological, ethnological, and ethnographic data. Prerequisite: SO 151.

SO 302 Deviant Behavior 3 Fall S
CW

Examines contemporary psychological and sociological theories of behavior deviation, including crime, delinquency, substance abuse, and selected other categories. Typologies for classifying and studying crime are developed and evaluated. Trends in behavior deviation, including the characteristics of offenders and victims, are critically explored. Informal and formal, as well as proactive and reactive, social control systems aimed at managing behavior deviation are described and analyzed. Prerequisites: SO 101 or SO 151.

SO 310 American Indians 3 Variable S CW

An examination of the social, religious, economic, and political lives of American Indian poeples (both urban and rural) set in historical and anthropological perspectives. Prerequisites: SO 101 or SO 151 and SO 254.

SO 311 Topics in Anthropology 3 Variable S

Occasional offerings in which students and professor explore an area of specialized interest. Some themes include: religion, gender; culture change; cultural ecology; frontiers; and insider/outsider. Prerequisite: SO 151 or SO 254.

SO 316 North American Prehistory 3 Variable S

A survey of the archaeological evidence left behind by the peoples of North America before Columbus. Students learn about the diversity of groups that range in scale from hunter-gatherers to highly complex societies, and how they exploited various ecological niches. Prerequisite: SO 151 and SO 254

SW 330 Social Work Practice: Individual, Family & Small Groups Laboratory 2 Fall

Supervised field work in an approved social work agency. Provides opportunity to observe agency function and apply beginning social work practice skills. Corequisite: SW 331. Prerequisite: SW 230.

SW 331 Social Work Practice: Individual, Family & Small Groups 4 Fall S CW

Explores the problem solving processes used in social work practice with individuals, families, and small groups. Interviewing and problem solving skills, family systems analysis, and group process are refined in preparation for beginning practice with individuals, families, and small groups. Corequisite: SW 330. Prerequisite: SW 230.

SW 332 Social Work Practice: Large Groups, Organizations & Communities 4 Fall S CW

Focuses on the problem solving processes employed in the delivery of social work services at the agency, institutional, and community level. Primary consideration is given to the systems approach to communities and the techniques, strategies, and roles utilized by the worker in assisting communities and groups to attain satisfying and developmental levels of social functioning. Prerequisite: SW 230.

SW 333 Social Welfare Policy & Services 3 Fall or Spring S

A conceptual study of the meanings, nature, scope, implementation, and evaluation of social policy as it relates to issues of social welfare. Prerequisites: SW 231 and ND.SS 215.

SO 351 Cultures of the World 3 Alternate Spring SI CW

An ethnographic introduction to the variation in human cultural systems. A cultural perspective is used to examine diversity in bands, tribes, chiefdoms, and their relation to "modern" societies. Prerequisite: SO 151 or SO 254.

SO 360 Issues in Law Enforcement and Corrections 3 Spring S CW

The course includes the identification and exploration of emerging themes in law enforcement such as privatization. Investigative techniques for crimes against person and property, challenges to the investigator, and the investigator's role in court are other topics. Prerequisite: SO 260.

SO 362 Juvenile Justice 3 Alternate Years Spring S CW

The issues, trends, and challenges facing juvenile justice professionals are explored in this course. The history and philosophy of juvenile justice, processing, detention, and diversion of juvenile offenders are topics of the course. Prerequisite: SO 260.

SO 363 Corrections 3 Spring S

Incarceration, community-based alternatives, treatment of offenders, effects of institutional life,

special populations, legal issues and liability are topics of the course. Prerequisite: SO 260.

SO 400 Sociology of Health, Illness & Medicine 3 Spring S CW

A study of a variety of social factors and processes involved in the development of health and illness and the ways individuals and society respond to and treat illness. Prerequisite: SO 101 or SO 151 or seniors with permission.

SO 411 History of Anthropological Thought 3 Variable S CW

Explores the major theoretical orientations of anthropology, including: functionalism; structuralism; social evolutionism; symbolic and interpretive anthropology; and also a consideration of Marxist, feminist, and indigenous critiques. A capstone experience for all upper level anthropology POEs. Prerequisite: SO 151 or SO 351 and SO 254.

SO 453 Archaeology 3 Variable S

An advanced introduction to archaeological method and theory. Students use a computer-simulated excavation to learn how to develop research problems; design research strategies; and collect, analyze, and interpret data in addition to writing a site report. Prerequisites: SO 254 and ND.SS 214.

SO 460 Research in Comparative Justice 3 Spring S CW

The course involves the analysis and comparison of three substantially different criminal justice systems from three countries of choice (i.e. England, Holland, and Japan). Prerequisites: SO 260, junior or senior standing, and permission of instructor.

SO 461 Criminalistics: Forensic Science 3 Alternate Years Fall S CW

The course is designed for the student of criminal justice who will be introduced to forensic criminal investigation, including the techniques, abilities, and limitations of the modern crime lab. Prerequisites: SO 260.

SW 490 Social Work: Professional Semester 12 Spring S

Full time supervised senior capstone field experience in an approved social work agency. Students integrate the knowledge, values and skills of the social work profession with experiential learning in preparation for assuming the responsibilities of an entry-level social work professional upon graduation. Corequisite: SW 495. Prerequisite: permission.

SO 492 Sociology Internship 2-9 Fall & Spring S

(refer to catalog section on internships.) Corequisite: SO 495. Prerequisite: permission.

SO 493 Criminal Justice Internship 2-6 Fall & Spring S

The internship provides practical experience in a variety of criminal justice settings. Internships are aimed at helping students develop marketable skills for their criminal justice careers. Prerequisites: senior standing and permission of the instructor. Corequisite: SO 494.

SO 494 Criminal Justice Research Seminar 2-3 Fall & Spring S

The research seminar requires students to reflect on the internship experience and pursue research related to the placement. Corequisite: SO 493.

SW 495 Social Work: Professional Semester Research Seminar 3 Spring S

Involves research and discussion of practice issues of importance to the generalist social worker focusing on the impact these issues have on the student's own practice experience. Corequisite: SW 490. Prerequisite: permission.

SO 495 Sociology: Professional Semester Research Seminar 2-6 Fall & Spring S

Requires students to reflect on the internship experience and/or pursue research related to the placement. Corequisite: SO 492. Prerequisite: permission.

THEATRE ARTS

(see English, Communication, & Theatre Arts)

WORLD LANGUAGES AND CULTURES

	Office
Associate Professor Henderson (Chair, French)	HUM 206
Professor Jaeger (German)	HUM 205
Professor Roney (Russian, International Studies)	HUM 204
Professor Thurston-Griswold (Spanish)	HUM 208
Assistant Professor Hertel (Spanish)	HUM 207

Intensive English Program

Elizabeth Smolcic (Director)	Oller Center, 2nd floor
Instructor Ingerman	Oller Center, 2nd floor
Instructor Carney (Spanish)	HUM 100

Background Information:

The Department of World Languages and Cultures is one of the cornerstones of the Humanities at Juniata College. In addition to offering language instruction at all levels, we give you the knowledge and skills to understand, analyze, study, and work successfully in other cultures. The department also offers the Intensive English Program (IEP) for international students that is designed to offer a learning experience that will quickly build English skills for use in academic and professional worlds. Whatever language you study, learning it and the cultural contexts in which it is used will make a difference in how you see the world and in how the world sees you.

Special programs, facilities, or equipment:

- Study Abroad options
- Computer-aided instruction and multimedia materials
- Small class sizes
- Individualized instruction
- International Certificates

Programs of Emphasis:

- French
- German
- Spanish
- Russian
- K-12 certification in French, German, and Spanish
- K-12 duel teaching certification in any two of the above languages

Student Designed Programs of Emphasis:

- Biology/French
- German/Biological Studies
- History/French
- Allied Health/Spanish
- French/International Affairs
- Spanish/Hispanic Cultures
- Accounting/Spanish

Secondary Emphasis:

- Requirements: Minimum of 15 credits beyond the third semester level, selected with advisors.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 100 English Writing & Composition 0-1 Fall
This is a writing course designed for low intermediate level students. The focus of the course is on gaining fluency and confidence in written communication and becoming comfortable as a writer. The process of revision will be introduced and students will compile a writing portfolio. Sentence structure and the paragraph will be the initial emphasis and by the course end, students will be able to organize paragraphs into short one and two page essays.

ESL 101 Listening & Speaking 0-1 Fall
Instruction in this class will focus on developing communicative abilities in informal speech contexts. Building oral/aural fluency will occur in the classroom through group and pair activities, pronunciation practice, and project work. Guided interactions with native speakers of English outside of the classroom are encouraged through surveys, interviews, a listening log and informal conversation.

ESL 102 Reading & Study Skills 0-1 Fall
The focus of this course is on learning and applying strategies to improve reading comprehension and rate, using authentic college text material of increasing complexity. The course also offers the basic skills required for success in the college classroom (managing time effectively, awareness of learning styles and strategies, use of the library and computer for information searches, group interaction and problem-solving skills and note-taking skills.)

ESL 103 Grammar in Use – Level 1 0-1 Fall
Students will review basic grammatical structures of the English language. Grammar will be presented as a system to help students understand the patterns of the language. Computer-based instruction will be a component of the course.

ESL 150 Academic Writing 1 Fall or Spring
This writing course is designed for students of a high intermediate level (TOEFL 450-520). Students will develop their fluency as writers as well as find a sense of their own personal "voice" and style as writers. They will become adept at revising their own writing and analyzing the writing of others. They will complete 4 essays that will give them practice in several different modes of writing--compare/contrast, description, narrative, and/or cause and effect. The process that the student follows to develop the essays will be illustrated in a final portfolio.

ESL 151 Conversation & Discussion 1 Spring
Students in this course will improve their self-confidence and abilities in both listening and speaking. They will work on improving their ability to begin, end and keep a conversation going, ask questions to get information and give an opinion or exchange ideas as part of a discussion. The course will also include practice with aspects of English pronunciation that focus on correct intonation and rhythms of American English. They will also work intensively to improve their listening skills and general understanding of lectures, TV and radio broadcasts and informal conversations.

ESL 152 Reading & Vocabulary Development 1 Spring
This course will offer specific strategies for improving reading comprehension and rate by using authentic materials (media and college-related texts). Vocabulary development will be an important component of the class, so that the students are better able to understand complex written information. Through on-campus interviews and discussion groups, students will understand the norms and expectations of the U.S. academic environment.

ESL 153 Grammar in Use – Level 2 1 Fall or Spring
Instruction in this class will focus on understanding how to use grammar to speak and write correctly as well as to understand spoken and written speech. Grammar will be presented as a system to help students interact in the English language correctly. It is will be taught as a tool to analyze language and become aware of patterns.

ESL 200 America: A Nation of Immigrants 1 Fall
This content-based class focuses on American values and the changing influence of immigrants to America. Students use their own cultural identity as a springboard to deepen their understanding of the different immigrant cultures presented. The language focus is on learning and refining reading and writing skills, develop group interaction skills, and improve listening and speaking skills. Throughout the semester, students refine many of these language skills as they develop a self-directed research project.

ESL 201 From Egg to Ancestor: A Study of Cultures 1 Spring
This content-based course explores culture through the chronology of life stages beginning with conception and ending with afterlife. Students are exposed to American psychosocial theories and relate these to their own and other cultures in a holistic approach. Vocabulary, reading, writing, grammar, research, discussion and oral presentations are integrated into class work.

ESL 211 Advanced Listening & Speaking Seminar 3 Fall or Spring CS
The overall goal of this course is to refine students' listening and speaking skills in the English language so that they may demonstrate a high level of competency and ease in conversation in most informal and some formal settings. Students will learn to narrate and describe in the main time frames and sustain communication through the use of connected discourse. The course will also require that students participate in a one-to-one conversation partner experience, which will provide direct learning of American culture outside of the college community and encourage an advanced level of general communicative proficiency.

ESL 212 Advanced Reading 3 Fall or Spring CS
In this course students refine and practice the necessary reading skills and strategies to understand written texts of increasing complexity. These skills include improving reading rate and comprehension, vocabulary expansion, summarizing and note-taking. Reading texts are from college textbooks, the media and American literature and provide a broad overview of the types of written materials that students will encounter in the academic community. Each student will give several short oral presentations and a longer final presentation that will require substantial research.

ESL 250 College Writing 3 Fall or Spring CW
Students learn to apply various strategies and organizational patterns in order to write well-organized essays using the types of writing modes required in academic courses. Students study and improve their use of certain grammatical concepts often used erroneously in writing by non-native speakers. Students complete several essays and a research paper as part of a portfolio of their written work to demonstrate their proficiency. Peer editing plays a major part in revisions, as well as individual conferencing with the instructor.

FRENCH (FR)

FR 110 French I 4 Fall HI*
Emphasizes the four communicative skills (speaking, reading, writing, and listening) focusing on the context of everyday life. Note: *Students may receive H or I credit provided that they have not taken more than two years of the language at the secondary-school level.

FR 120 French II 4 Spring HI CS
A follow-up to French I emphasizing the four communicative skills. Note: placement to French II is by departmental discretion. Prerequisite: FR 110.

FR 201 Major Works in French Literature 4 Fall or Spring HI CW,CS
A survey of representative works of French literature taught in translation. The course will examine texts of major historical importance as well as contemporary works that reflect current trends in French culture. Note, this course meets simultaneously with FR 301.

FR 202 Francophone Literature in Translation 3 Alternate Yrs HI Fall or Spring CW,CS
A survey of Francophone literatures and cultures in Africa and the Caribbean. Discussions will focus on issues of race, gender, and politics in contemporary texts and films: Note: This course is taught in English. (A CAII Course)

FR 210 Intermediate French I 3 Fall HI CS
Development of the four language skills with emphasis on creating strong conversational abilities. Note: placement in Intermediate French is by departmental discretion. Prerequisite: FR 120.

FR 220 Intermediate French II 3 Spring HI CS
Students will reach a level of proficiency that will allow them to communicate effectively with

native speakers in a wide variety of cultural contexts and social situations. Prerequisite: FR 210. Note: placement in FR 220 is by departmental discretion.

FR 230 Conversation 3 Spring HI CS

Intensive oral review that permits the intermediate level speaker to increase proficiency and communicative ability in practical and topical contexts. Prerequisite: FR 220. (Students may enroll concurrently in FR 220 and FR 230 in the same semester).

FR 250 Introduction to French Literature 1100-1800 3 Fall or Spring HI CW,CS

A survey of representative works from the major authors and movements of French literature. Students will read, analyze, and discuss texts from the Middle Ages through the Enlightenment. Course conducted in French. Prerequisite: FR 220.

FR 260 French Civilization & Culture 3 Alternate Yrs HI Fall or Spring CW,CS

A historic overview of French culture and civilization in language, architecture, art, literature and film. Prerequisite: FR 220.

FR 270 Francophone Civilization and Culture II 3 Alternate Yrs HI Fall or Spring CW,CS

An introduction to the history and influence of French culture outside Europe. Students will gain a general knowledge of contemporary French-speaking cultures that exist throughout the world. Prerequisite: FR 220.

FR 302 Francophone Literature 4 Fall or Spring HI CW,CS

Note: Meets along with FR 202; additional work is assigned in French. Prerequisite: FR 240, or approval of instructor.

FR 320 Contemporary French Novels 3 Fall or Spring HI CW,CS

Reviews representative works by such major twentieth century French novelists as Mauriac, Gide, Proust, Sartre and Malraux. Varied selections are used each year. Prerequisites: two 200-level courses.

FR 330 Advanced French Conversation & Composition 3 Fall or Spring HI CW,CS

Designed for students who wish to perfect their knowledge of expressions in an oral context. The course will also put great emphasis on writing in French for all purposes. Different paper topics will be assigned on a regular basis, including literature, film, politics, current events, and critical reviews. Prerequisite: FR 220.

FR 398 Methods for Foreign Language Education 4 Fall S CW,CS

This course provides a thorough introduction to contemporary pedagogical theories and methods for students interested in teaching foreign languages or English as a second language (ESL). Students seeking K-12 certification in foreign languages should take this course instead of ED 420 after completing study abroad. It may also be taken by those students interested in teaching English abroad. International students attending Juniata for a semester or a year may also consider taking this course.

FR 399 Special Topics 3 Fall or Spring HI CW,CS

Provides courses not covered by the regular offerings. These are developed to meet the needs of students of advanced standing and have included themes in Medieval & Renaissance Literature and French Women Writers.

FR 450 Research Project in French 3 Fall & Spring HI CW,CS

An independent research project or thesis which will be designed by the student with the assistance of the instructor. Throughout the semester, the student will research his/her topic and submit a final paper or thesis to be defended at the end of the semester. Prerequisites: three 300-level French courses and permission, or a year of study abroad and permission.

GERMAN (GR)

GR 110 Introductory German I 4 **Fall** **HI***

Emphasizes the four communicative skills (listening, speaking, reading, writing) in the context of everyday life. Note:*Students receive H or I credit provided that they have not taken more than two years of the language at the secondary-school level.

GR 120 Introductory German II 4 **Spring** **HI CS**

A follow-up to German I emphasizing the four communicative skills in the context of everyday life. Note: placement in German 120 is by placement test or departmental discretion. Prerequisite: GR 110

GR 210 Intermediate German I 3 **Fall** **HI CS**

Covers more complex language structures and grammatical problems completing the basic program. Continues with the development of the four communicative skills placing emphasis on strong conversational abilities in a wide variety of cultural contexts and social situations. Note:Placement in German 210 is by placement test or departmental discretion. Prerequisite: GR 120.

GR 220 Intermediate German II 3 **Spring** **HI CS**

Continued intensive work in the four language skills in a wide variety of cultural contexts and social situations. Students will reach a level of proficiency that will allow for effective interactions with native speakers and qualify them linguistically for study in Germany during the junior year. Note: Placement in German 220 is by placement test or departmental discretion.Prerequisite: GR 210.

GR 230 German Conversation 3 **Fall or Spring** **HI CS**

Permits the intermediate level speakers to develop further their oral proficiency and communicative ability in wide ranging topical contexts. Note: Placement in German 230 is by departmental discretion. Students in high standing may enroll concurrently in GR 220 and GR 230 in the same semester. Prerequisite: GR 220.

GR 235 German Composition 3 **Fall or Spring** **HI CW**

Enables the students to practice writing and fine-tune their writing skills for a creative and appropriate use of written German. Note: Placement in German 235 is by advanced placement or departmental discretion Prerequisite: GR 220.

GR 250 German Civilization and Culture 1 3 **Fall or Spring** **HI**
Alternate Years **CW,CS**

A historic introduction to the German culture and civilization, to the language, art, literature and science from the early Middle Ages to the 18th Century. Prerequisite: GR 230 or GR 235.

GR 260 German Civilization and Culture II 3 **Fall or Spring** **HI**
Alternate Years **CW,CS**

A historic overview of German culture from the 18th Century to the present day. Students study the dominant cultural trends and counter trends of the past three centuries in the context of critical, philosophical and literary writings. Prerequisite: GR 230 or GR 235.

GR 275 German Literature since WW II 3 **Fall or Spring** **HI**
Alternate Years **CW,CS**

An intensive introduction to reading and analyzing of critical and literary text by foremost German writers since WWII. Focuses on the events leading to the fall of the Berlin Wall in 1989 and weighs the diverse popular reactions to the subsequent unification of Germany. Prerequisite: GR 230 or GR 235.

GR 310 19th Century German Playwrights 3 **Fall or Spring** **HI CW,CS**

Students read, discuss and analyze works from such authors as H. von Kleist, Grabbe, Dutchner, Hebbel and Grillparzer. Discussion focuses on the timeless topic of man's "tragic existence" as portrayed in these works. Note: Conducted as a literary seminar. Placement in GR 310 is by departmental discretion. Prerequisite: GR 250 or up.

GR 320 Early 20th Century German Literature 3 **Fall or Spring** **HI CW,CS**

Examines readings from the works of the Expressionist generation and such authors as the young Brecht, von Hofmannsthal, Kafka, T. Mann, Rilke, Wedekind and Werfel. Selections are varied, yet representative of each respective author. Note: Conducted as a literary seminar. Placement in GR 320 is by departmental discretion. Prerequisite: GR 250 or up.

GR 398 Methods for Foreign Language Education 4 **Fall** **S CW,CS**

This course provides a thorough introduction to contemporary pedagogical theories and methods for students interested in teaching foreign languages or English as a second language (ESL). Students seeking K-12 certification in foreign languages should take this course instead of ED 420 after completing study abroad. It may also be taken by those students interested in teaching English abroad. International students attending Juniata for a semester or a year may also consider taking this course.

GR 399 Special Topics 3 **Fall or Spring** **HI CW,CS**

Provides courses not covered by the regular offerings. These are developed to meet the needs of students of advanced standing.

RUSSIAN (RU)

RU 110 Russian I 4 **Fall** **HI***

The basic introduction to the Russian program: correct speaking, reading, and writing on the elementary level. Note: *Students receive H or I credit provided that they have not taken more than two years of the language at the secondary school level.

RU 120 Russian II 4 **Spring** **HI CS**

The continuation of the basic program with more intensive work in correct speaking, reading, and writing. Note: advanced placement is by departmental discretion. Prerequisite: RU 110.

RU 200 Survey of Slavic Literature 3 **Every Fourth Fall** **HI CW,CS**

Examines the literature of the Slavic peoples by comparing the works of Russian authors from different periods with those of other Slavic nations. Examples will be taken from the Renaissance, Romanticism, the realistic novel, and the Soviet and post-Soviet periods. Taught in English.

RU 201 Women in Slavic Literature 3 **Every Fourth Fall** **HI CW,CS**

Examines the depiction of women both as objects of male representation and as authors of their own texts. The major emphasis will be on Russian literature. Readings will include Anna Karenina and works of various genres by women writers and social thinkers. Films by women directors will also be discussed. Taught in English.

RU 202 Science Fiction from the Other Side of Europe 3 **Every Fourth Fall** **HI CW,CS**

Examines the Central European tradition of science fiction as a genre of social commentary and utopian speculation. Writers will include Karel Capeek (the inventor of the term "robot"), Evgenii Zaamiatin (the author of the model for 1984), Stanislaw Lem (once the best-selling science fiction author in the world), and the Strugatskii brothers. Films will also be discussed. Taught in English.

RU 203 East European Film 4 **Every Fourth Fall** **HI CW,CS**

Examines the films and writings on film of some of the famous East European directors: Eisenstein and other early Soviets, Czech films in the 1960s, Georgian films of the eighties, Wajda and other Polish filmmakers, and current Russian films. Taught in English.

RU 209 Revolutionaries, Prophets, and Peasants in Russian History 3 **Fall** **HI CW,CS**

(See HS 209) (A CA II Course)

RU 210 Intermediate Russian 3 **Fall** **HI CS**

The continuation of the basic program with a more intensive review of special grammatical problems. Speaking, writing, reading, and the development of an appreciation of Russian culture are stressed through selected readings. Prerequisite: RU 120.

RU 230 Russian Conversation 3 **Fall** **HI CW,CS**

The intensive reading of literary and popular texts as a basis for composition and conversation. Prerequisite: RU 210.

RU 235 Tolstoy 3 **Every Fourth Spring** **HI CW,CS**

An examination of Tolstoy's development as a thinker about war and religion and his search for a literary form adequate for the expression of his ideas and moral sense. Readings will include: "Sevastopol Tales," *War and Peace*, Confession, "Death of Ivan Ilyich," and some selections from his writings on non-resistance to evil. (A Peace and Conflict Studies course). Prerequisite: EN 110 or another Russian literature course or permission. Taught in English.

RU 240 Dostoevsky: Rebellion, Dialogue, and the Search for God 3 **Every Fourth Spring** **HI CW,CS**

Examines the writings of Dostoevsky in light of the social problems of his day and his personal search for truth and God in a world increasingly dominated by scientific materialism. Particular emphasis will be placed on Bakhtin's thesis that Dostoevsky invented a new form of the novel as well as on the darker sides of Dostoevsky's messianism and possible anti-semitism. (A CAll Course). Taught in English.

RU 245 Major Twentieth Century Slavic Authors 3 **Every Fourth Spring** **HI CW,CS**

Careful reading and discussion of one or more Slavic authors of the twentieth century. Authors might include: Pasternak, Solzhenitsyn, Voinovich, Milosz, Gombrowicz, Kundera, Hasek, Tsvetaeva, or others. The course will always study the work of one Russian author in detail. Prerequisite: EN 110 or another Russian literature course or permission. Taught in English.

RU 250 Short Story in Russian Literature 3 **Spring** **HI CW,CS**

The reading, discussion, and analysis of short stories by major Russian authors: Pushkin, Gogol, Turgenev, Dostoevsky, Tolstoy and Chekhov. Note: taught in English, although Russian language students receive assignments in original texts. Prerequisite: EN 110 or another Russian literature course or permission. Taught in English.

The following advanced Russian courses are offered every fourth year and meet along with the corresponding 200-level courses. Each course contains additional work on Russian language and meetings in Russian. RU 230 is a prerequisite for all of these courses.

RU 300 Survey of Slavic Literature	4	**Every Fourth Fall**	**HI CW**
RU 301 Women in Slavic Literature	4	**Every Fourth Fall**	**HI CW,CS**
RU 302 Science Fiction from the Other Side of Europe	4	**Every Fourth Fall**	**HI CW**
RU 303 East European Film	4	**Every Fourth Fall**	**HI CW**
RU 335 Tolstoy	4	**Every Fourth Spring**	**HI CW,CS**
RU 340 Dostoevsky: Rebellion, Dialogue & the Search for God	4	**Every Fourth Spring**	**HI CW,CS**
RU 345 Major Twentieth Century Slavic Authors	4	**Every Fourth Spring**	**HI CW,CS**
RU 350 Short Story in Russian Literature	4	**Every Fourth Spring**	**HI CW,CS**

Please note that RU 230 is a prerequisite for all of these classes.

RU 398 Methods for Foreign Language Education 4 Fall S CW,CS

This course provides a thorough introduction to contemporary pedagogical theories and methods for students interested in teaching foreign languages or English as a second language (ESL). Students seeking K-12 certification in foreign languages should take this course instead of ED 420 after completing study abroad. It may also be taken by those students interested in teaching English abroad. International students attending Juniata for a semester or a year may also consider taking this course.

RU 399 Special Topics 3 Fall or Spring HI CW,CS

Provides individualized instruction in topics not covered by the regular offerings. These are developed to meet the needs of students.

RU 450 Senior Research Project I 3 Fall HI CW,CS

Involves two consecutive semesters of study. During the first semester the student will identify the topic of research, prepare a detailed abstract, gather the necessary materials and provide evidence that the bulk of the research has been completed. Students may undertake projects in teaching, literature, culture, or linguistics. Other topics may also be possible. Projects may involve the participation of faculty in related disciplines. Prerequisite: One 300-level writing course and permission.

RU 451 Senior Research Project II 3 Spring HI CW,CS

A continuation of RU 450. During this semester students will complete their project by writing and defending an account of their work. The exact nature of this account will vary according to the nature of the project. However, all accounts must be of significant length, reveal a sustained depth of thought, be fully documented, and be defended orally. Prerequisite: RU 450.

SPANISH (SP)

SP 110 Spanish I 4 Fall & Spring HI*

Emphasizes fundamentals of grammar, pronunciation, and language production. The development of skills in oral comprehension, speaking, writing, and reading, as well as Hispanic cultures are stressed. Note: *Students receive H or I credit provided that they have not taken more than two years of the language at the secondary-school level.

SP 120 Spanish II 4 Fall & Spring HI CS

The continued study of the fundamentals of grammar, pronunciation and language production stressing the development of skills in oral comprehension, speaking, writing and reading, as well as Hispanic cultures. Note: placement in Spanish II is by departmental discretion. Prerequisite: SP 110.

SP 210 Intermediate Spanish 3 Fall & Spring HI CS

Covers more complex language structures completing the basic program. Development of the four skills is continued with an emphasis on integrating Hispanic cultures into the language learning process. Prerequisite: SP 120.

SP 230 Spanish Conversation & Composition 3 Fall or Spring HI CW,CS

Enables students to continue developing their Spanish language proficiency. Short literary and cultural readings from Hispanic cultures serve as the basis for intensive oral and writing practice. Note: regular attendance at the Spanish conversation table is mandatory.

SP 240 Sound and Form in Spanish 3 Fall or Spring HI CW,CS

An analysis of Spanish phonemics and phonetics through oral and written exercises. Focus is on the study of grammar and syntax with application through extensive writing and oral communication. Prerequisite: SP 210.

SP 250 Depth & Style in Spanish Readings 3 **Fall or Spring** HI CW,CS

Emphasizes the development of skill in reading Spanish and the study of textual analysis with application to major works from Spain and Spanish America. Prerequisite: SP 210.

SP 260 Spanish Civilization 3 **Fall or Spring** HI CW,CS

An introduction to the many facets of Spanish civilization: art, music, history, literature, philosophy and everyday life. Prerequisite: SP 210.

SP 270 Contemporary Hispanic Short Fiction 3 **Fall or Spring** HI CW,CS

An intensive introduction to reading and analyzing twentieth-century Spanish and Spanish American short narrative. Study of the literary texts enables students to develop a better understanding of and appreciation for Hispanic cultures while continuing to build their Spanish language proficiency. The course is conducted in Spanish and all assignments are read and written in the target language. Prerequisite: SP 210.

SP 280 Contemporary Spain: 1931 to the Present 3 **Fall or Spring** HI CW,CS

An intensive introduction to contemporary Spain starting from the proclamation of the Second Republic in 1931. Topics to be studied include: Spain's peaceful transition from dictatorship to democracy, economic development and social change, Spain's role in the European Union, mass and elite cultural movements, and the challenges facing Spain's younger generation. Prerequisite: SP 210.

SP 300 Myth & Magic Realism 3 **Fall or Spring** HI CW,CS

Explores the richness and diversity of Hispanic cultures through the analysis of texts that range from Pre-Columbian myths to recent Spanish American films. Note: taught in English.

SP 310 Modern Spanish Theater 3 **Fall or Spring** HI CW,CS

Reviews the Spanish theater from Neo-classicism through Romanticism, Realism and the contemporary scene. Prerequisite: SP 250 or SP 260

SP 320 Contemporary Spanish Novel 3 **Fall or Spring** HI CW,CS

A detailed study of major 20th Century Spanish novels. Selections are varied and include recent works. Note: conducted as a seminar. Prerequisite: SP 250.

SP 330 Spanish American Theater 3 **Fall or Spring** HI CW,CS

A study of the major contemporary dramatists of Spanish America with special emphasis on their place in world drama. Prerequisite: SP 250.

SP 340 Medieval & Renaissance Spanish Literature 3 **Fall or Spring** HI CW,CS

Analyzes the origin and development of the various genres in the Middle Ages and Renaissance. Includes the reading of the Poema de Mio Cid, El libro de buen amor, La Celestina, Lazarillo de Tormes, ballads, early theatrical works and other selections. Prerequisite: SP 250.

SP 370 Contemporary Hispanic Short Fiction 3 **Fall or Spring** HI CW,CS

Note: Meets with SP 270; additional work is assigned. Prerequisite: SP 250 and study abroad experience, or approval of instructor.

SP 380 Contemporary Spain: 1931 to the Present 3 **Fall or Spring** HI CW,CS

Note: Meets with SP 280; additional work is assigned. Prerequisite: SP 250 or SP 270 and study abroad experience, or approval of instructor.

SP 398 Methods for Foreign Language Education 4 **Fall** S CW,CS

This course provides a thorough introduction to contemporary pedagogical theories and methods for students interested in teaching foreign languages or English as a second language (ESL). Students

seeking K-12 certification in foreign languages should take this course instead of ED 420 after completing study abroad. It may also be taken by those students interested in teaching English abroad. International students attending Juniata for a semester or a year may also consider taking this course.

SP 399 Special Topics 3 **Fall or Spring** HI CW,CS

Provides courses not covered by the regular offerings. These are developed to meet the needs of students of advanced standing.

SP 400 Spanish American Novel 3 **Fall or Spring** HI CW,CS

Uses major representative 20th Century novels from Spanish American countries to provide a deeper understanding of the various continental cultures. Note: conducted as a seminar. Prerequisite: SP 250.

DIRECTORIES

DIRECTORIES

Board of Trustees	180
Faculty	181
Administration	185
Office of the President	185
Student Development	185
Academic Affairs	185
Student Services	185
Athletic Department	186
College Advancement	186
Business Affairs	187
Campus Ministry	187
Emeriti	187
Board	187
Faculty	188
Administration	189
Staff & Departmental Assistants	189

BOARD OF TRUSTEES

Date in parentheses is that of appointment to the Board.

Officers

Cramer, John McN., *Chair*
Gibbel, Henry H., *Treasurer*
Alexander, William R., *Assistant Treasurer*
Pheasant, Thomas R., *Secretary*
Clarke, Cynthia G., *Assistant Secretary*

Members

Kepple, Thomas R. Jr., B.A., M.B.A., Ed. D (1998)

Terms Expire 2003

Brinker, John A. '69, B.S., M.B.A., Santa Barbara, CA (2000)

Beachley, Donovan R., Jr. '47, B.S., M.S., Hagerstown, MD (1982)

Brumbaugh, F. Samuel '54, B.S., Pen Argyl, PA (1987-90) (1991)

Cramer, John McN. '63, B.A., LL.B., Harrisburg, PA (1982)

Dale, John A. '54, B.S., M.A., Trenton, NJ (1997)

Detwiler, Donald L. '64, B.S., Hollidaysburg, PA (1994)

Gibbel, Henry H. '57, B.S., Lititz, PA (1973-76, 1978)

Hershberger, Dorothy '50, B.S., Martinsburg, PA (2000)

Hess, Kenneth E. '75, B.S., Ephrata, PA (2000)

Hesselbein, Frances R., L.H.D., New York, NY (1988)

Hollinger, Richard W. '53, B.S., Hummelstown, PA (2000)

Rideout, Dewayne E. '80, B.S., Center Valley, PA (2000)

Rosenberger, W. Clemens '54, B.S., M.Div., D.D., Lancaster, PA (1979)

Solomon, Robert J. '60, B.A., New York, NY (2000)

Sunderland, Klare S. '56, B.S., L.L.D., Camp Hill, PA (1970)

Wagoner, Robert E. '53, B.S., Hummelstown, PA (1982)

Wise, Charles W. III A.B., M.B.A., Pittsburgh, PA (2000)

Terms Expire 2002

Andrews, David P. '74, B.A., J.D., Altoona, PA (1992-1995; 1999)

Baker, Anne C., B.A., B.M., M.A., J.D., New York, NY (1987)

Brown, Charles C., Jr. '59, B.A., J.D., Bellefonte, PA (1976-79, 1981)

DeMar, Francis X., Huntingdon, PA (1990)

Halbritter, Barry J. '65, B.S., Duncansville, PA (1987)

Hershberger, William E. '57, B.S., Auburn, NY (1989)

Kindig, Karl K. '72, B.S., J.D., Abingdon, VA (1994)

Lake, Carol L. '66, B.S., M.D., Sacramento, CA (1996)

McDowell, Robert N. '67, B.A., M.A., Madison, NJ (1999)

Sill, Eileen G. '57; B.S., Yardley, PA (1999)

Swigart, John W. Jr. '61, B.A., LL.B., Huntingdon, PA (1999)

Swigart, Patricia B. B.T., A.A., Huntingdon, PA (1999)

Taylor, Maurice C. '72, B.A., M.S.S., Ph.D., J.D., Cantonsville, MD (1993)

White, Mary M. '73, B.S., M.S., Englewood, CO (1999)

Wohlbruck, Aliceann '58, B.A., M.P.A., Washington DC (1999)

Terms Expire 2001

Faulkner, Sharon C. '69, B.S., State College, PA (1998)

Keyser, Verdean C. '67, B.S., Boswell, PA (1996)

Michel, Harriet R. '65, B.A., New York, NY (1989)

Pheasant, Thomas R. '66, B.S., M.D., Wormleysburg, PA (1988-91, 1992)

Statton, Timothy D. '72, B.S., San Francisco, CA (1998)

Zeller, A. Marie '63, B.A., M.C.P., San Francisco, CA (1985-88, 1989)

FACULTY

The date in parentheses is that of first appointment to Juniata faculty.

Alexander, William R., *Associate Professor of Economics and Vice President for Finance and Operations* (1966). B.S., Juniata College, 1966; M.A., University of Minnesota, 1972.

Atwill, David G., *Assistant Professor of History* (1999). B.A., Whitman College, 1989; M.A., Ph.D., University of Hawaii, Manoa, 1994, 1999.

Bargiel, Diane M., *Assistant Professor of Music* (1996). B.M., Youngstown State University, 1985; M.M., Michigan State University, 1987.

Barlow, J. Jackson, *Associate Professor of Political Science* (1991). Junior Faculty Award (1995). B.A., Carleton College, 1976; M.A., Ph.D., Claremont Graduate School, 1981, 1984.

Belser, Andrew, *Assistant Professor of Theatre Arts* (1997). B.A., Grove City College 1982; M.A., Villanova University, 1985; M.F.A., Virginia Tech, 1995.

Bennett, Randy L., *Associate Professor of Biology* (2000). B.A., Western Maryland College, 1985; Ph.D., University of Wisconsin-Madison, 1993.

Borgardt, James D., *Assistant Professor of Physics* (1998). B.S., University of California, Santa Barbara, 1989; M.S., Ph.D., University of Arizona, 1995, 1997.

Bukowski, John F., *Assistant Professor of Mathematics* (1997). B.S., Carnegie Mellon University, 1991; Sc.M., Ph.D., Brown University, 1992, 1997.

Byron, Michael C., *Associate Professor of Education* (1994). B.S., Western Connecticut State College, 1969; M.S., University of Hartford, 1977; M.A.I.A., Ph.D., Ohio University, 1987, 1990.

Cook-Huffman, Celia B., *Associate Professor of Peace Studies* (1990). Junior Faculty Award (1996). B.A., Manchester College, 1986; M.A., University of Notre Dame, 1988; Ph.D., Maxwell School of Citizenship and Public Affairs of Syracuse University, 1993.

DeHaas, Sarah J., *Associate Professor of Education* (1997). B.S., Slippery Rock State College 1980. M.Ed, Providence College 1988; Ph.D., Pennsylvania State University 1991.

Demarest, Jeffery R., *Professor of Biology* (1994). B.S., Monmouth College, 1973; Ph.D., University of California, Berkeley, 1980.

Donaldson, James R., *Professor of Economics and Business Administration* (1979). Beachley Distinguished Academic Service Award (1998). B.S., Juniata College, 1967; M.A., University of Akron, 1972; M.B.A., Syracuse University, 1984.

Drews, David R., *Charles A. Dana Supported Professor of Psychology* (1969). Beachley Distinguished Teaching Award (1989). B.A., Dennison University, 1965; M.S., Ph.D., University of Delaware, 1968, 1970.

Dudash, Andrew M., *Public Service Librarian and Instructor* (1997). B.A., Indiana University of Pennsylvania, 1995; M.L.S., University of Pittsburgh, 1997.

Earenfight, Phillip J., *Assistant Professor of Art History and Director of the Juniata College Museum of Art* (1996). B.A., University of Washington, 1985; M.A., Ph.D., Rutgers University, 1990, 1999.

Esch, Linda Sue, *Charles A. Dana Supported Professor of Mathematics* (1976). Lindback Distinguished Teaching Award (1979). Beachley Distinguished Teaching Award (1990). B.S., Juniata College, 1968; A.M., Ph.D., Boston University, 1970, 1974.

Fala, Grace M., *Associate Professor of Speech Communication* (1992). Junior Faculty Award (1998). A.A., Bucks County Community College, 1978; B.A., M.A., West Chester University, 1986, 1988; Ph.D., The Pennsylvania State University, 1993.

Fisher, Tom L., *Professor of Chemistry* (1976). B.S., Old Dominion University, 1964; Ph.D., Iowa State University, 1970.

Frandsen, Michael L., *Assistant Professor in Business Administration* (1999). B.S., M.B.A., The Pennsylvania State University, 1983, 1990

Fusco, David J., *Instructor of Information Technology* (1999). B.S., The Pennsylvania State University, 1990.

Glazier, Douglas S., *Professor of Biology* (1980). Beachley Distinguished Academic Service Award (2000). B.A., Oakland University, 1973; Ph.D., Cornell University, 1979.

Glosenger, Fay I., *Martin G. Brumbaugh Professorship in Education* (1982). Lindback Distinguished Teaching Award (1988), Beachley Distinguished Academic Service Award (1997). B.S., M.Ed., Ph.D., The Pennsylvania State University, 1971, 1977, 1984.

Goldstein, Peter M., *Associate Professor of English* (1991). B.A., Harvard University, 1976; J.D., University of Southern

California, 1979; Ph.D., University of California, Los Angeles, 1991.

Gustafson, Todd D., *Professor of Biology* (1976). Lindback Distinguished Teaching Award (1981). B.A., Jacksonville University, 1971; M.S., Ph.D., University of Wisconsin, 1973, 1976.

Hague, Mary A., *Assistant Professor of Political Science* (1996). B.A., Wake Forest University, 1984; M.A., Boston College, 1987; Ph.D., Boston College, 1994.

Henderson, Michael S., *Associate Professor of French* (1992). B.A., M.A., Arizona State University, 1982, 1984; Ph.D., University of California, Santa Barbara, 1991.

Hertel, Tammy J., *Assistant Professor of Spanish* (1999). B.S., M.A., University of Wisconsin-La Crosse, 1993, 1995.

Hochberg, Mark R., *Charles A. Dana Supported Professor of English* (1970). Beachley Distinguished Teaching Award (1980). B.A., University of Pennsylvania, 1966; M.A., Ph.D., Cornell University, 1969, 1970.

Hosler, Jay, *Assistant Professor of Biology* (2000). B.A., DePauw University, 1989; Ph.D., University of Notre Dame, 1995.

Hsiung, David C., *W. Newton and Hazel A. Long Professorship in History* (1991). Junior Faculty Award (1995). B.A., Yale University, 1983; M.A., Ph.D., The University of Michigan, 1985, 1991.

Jaeger, Klaus A.G., *Professor of German* (1972). Beachley Distinguished Teaching Award (1992). M.A., The Ohio State University, 1965; Ph.D., The Pennsylvania State University, 1989.

Johnson, Dennis L., *Assistant Professor of Environmental Science* (1999). B.A., Lock Haven University, 1989; B.S., M.S., Ph.D., The Pennsylvania State University, 1989, 1992, 1995.

Katz, Judith N., *Associate Professor of English* (1991). B.A., The City College of New York, 1966; M.A., Ph.D., The Pennsylvania State University, 1968, 1972.

Keeney, Jill B., *Associate Professor of Biology* (1994). Junior Faculty Award (1999). B.S., The Pennsylvania State Uni-versity, 1985; Ph.D., Washington Univer- sity, 1990.

Kipphan, Klaus P., *Charles A. Dana Supported Professor of History* (1965). Beachley Distinguished Teaching Award (1974). A.B., Gymnasium Eberbach, Germany, 1959; A.M., Fairleigh Dickinson University, 1965; Ph.D., University of Heidelberg, 1969.

Kirchhof-Glazier, Debra A., *Professor of Biology* (1981). Lindback Distinguished Teaching Award (1987). Beachley Distinguished Academic Service Award (1999) B.S., Lebanon Valley College, 1973; Ph.D., Cornell University, 1979.

Kruse, Gerald W., *Assistant Professor of Mathematics & Computer Science* (1999). B.S., University of Illinois, 1985; Sc.M., Ph.D., Brown University, 1993, 1997.

Lakso, James J., *Professor of Economics and Business Administration, Provost and Vice President for Student Development* (1970). Beachey Distinguished Teaching Award (1983). B.A., Wittenberg University, 1967; M.A., Ph.D., University of Maryland, 1970, 1973.

Lehmann, David, *Assistant Professor of Geology* (1997). B.S., Juniata College, 1983; M.S. MSTC, Miami University, 1986, 1987; Ph.D., University of Rochester, 1993.

Lewis, Janet R., *Associate Professor of Philosophy* (1970). Sears-Roebuck Teaching Excellence and Campus Leadership Award (1991). Beachley Award for Distinguished Teaching (1999) B.A., Wilson College, 1964; M.A., Bryn Mawr College, 1968.

Long, Ellen M., *Assistant Professor of Education* (1999). B.A., M.A., Assumption College, 1983, 1985; Ph.D., The Pennsylvania State University, 2000

Martin, Paula J.S., *Associate Professor of Environmental Science* (1998). B.S., University of California, Berkeley, 1984; M.S., Ph.D., University of Massachusetts, Amherst, 1989, 1993.

Matter, John M., *Assistant Professor of Biology* (1997). B.A., University of Missouri, 1983; M.S., Saint Louis University, 1987; Ph.D., University of Florida, 1995.

McBride, Alexander T., *Professor of Art* (1970). B.F.A., Rhode Island School of Design, 1962; M.F.A., Cornell University, 1964.

McLaughlin, Ronald K., *Professor of Psychology* (1985). Lindback Distinguished Teaching Award (1989). B.A., University of Missouri, 1977; M.S., Ph.D., Northwestern University, 1981, 1983.

Mitchell, Donald J., *Professor of Chemistry* (1967). Beachley Distinguished Teaching Award (1986). Beachley Distinguished

Academic Service Award (1991). B.S., Westminster College, 1960; Ph.D., Vanderbilt University, 1965.

Mumford, John W., *Director of the College Library* (1988). B.S., Elizabethtown College, 1982; M.A., Shippensburg University, 1983; M.L.S., Drexel University, 1988.

Murray, M. Andrew, *Professor of Religion and Peace and Conflict Studies and Director of the Baker Institute* (1971). L.H.D. Bridgewater College (1998). Beachley Distinguished Academic Service Award (1991). B.A., Bridgewater College, 1964; M.Div., D.Min., Bethany Theological Seminary, 1968, 1980; L.H.D., Manchester College, 1993.

Mutti, Laurence J., *Professor of Geology* (1978). Lindback Distinguished Teaching Award (1982). Beachley Distinguished Teaching Award (1995). B.A., Beloit College, 1971; Ph.D., Harvard University, 1978.

Nagengast, Emil, *Assistant Professor of Political Science* (1996). Beachley Junior Faculty Award (2000). B.A., Middlebury College, 1984; M.A., University of Kansas, 1990; Ph.D., University of Pittsburgh, 1996.

Nieto, Jose C., *Mary S. Geiger Professor of Religion and Professor of History* (1967). B.S., University of Santiago de Compostela, Spain, 1949; B.D., United Evangelical Seminary, Spain, 1956; Th.M., Ph.D., Princeton Theological Seminary, 1962, 1967.

Ochiai, Ei-Ichiro, *H. George Foster Chair of Chemistry* (1981). B.S., M.S., Ph.D., University of Tokyo, 1959, 1961, 1964.

Parvin, Kathleen A., *Instructor in English* (1996). B.A., James Madison University, 1985; M.A., Georgetown University, 1988.

Pauline, Ronald F., *Associate Professor of Education* (1997). B.S., Indiana State College, 1964; M.Ed., Indiana University of Pennsylvania, 1970; M.S., Pennsylvania State University, 1972; Ph.D., Pennsylvania State University 1987.

Peruso, Dominick F., *Assistant Professor of Accounting* (1999). B.S., Saint Francis College, 1995; M.Ed., The Pennsylvania State University, 1999.

Pienkos, Andrew C., *Associate Professor of Economics* (1998). A.B., Colgate University; M.A., Ph.D., Cornell University.

Radis, Susan T., *Professor of Social Work and Sociology* (1984). B.S., The Pennsylvania State University, 1969; M.S.S., Bryn Mawr College, 1973.

Ray, Sisir, *Assistant Professor of Mathematics & Computer Science* (2000). B.S., Jadavpur University; M.S., University of Burdwan; M.A.Sc., University of Windsor; Ph.D., North Dakota State University.

Reed, Ruth E., *Professor of Chemistry* (1976). Beachley Distinguished Teaching Award (1993). B.A., Winthrop College, 1968; Ph.D., Virginia Polytechnic Institute and State University, 1974.

Reilly, F. Robert, *Professor of Social Work and Sociology* (1974). Beachley Distinguished Teaching Award (1991). B.A., Susquehanna University, 1971; M.S.W., Marywood College School of Social Work, 1974; A.C.S.W. member.

Reingold, I. David, *Professor of Chemistry* (1988). Lindback Distinguished Teaching Award (1992). A.B., Dartmouth College, 1971; Ph.D., University of Oregon, 1976.

Rhodes, Loren K., *Professor of Mathematics and Computer Science* (1980). Lindback Distinguished Teaching Award (1986). B.S., M.S., Ph.D., The Pennsylvania State University, 1979, 1980, 1991.

Richardson, Kim M., *Professor of Education* (1979). Lindback Distinguished Teaching Award (1983). Beachley Distinguished Academic Service Award (1996). B.A., Duke University, 1969; M.S., Old Dominion University, 1972; Ph.D., Temple University, 1981.

Roney, James N., *Professor of Russian* (1988). Lindback Distinguished Teaching Award (1993). B.A., Dartmouth College, 1973; M.A., Ph.D., The Ohio State University, 1975, 1981.

Rosenberger, Randy M., *Assistant Professor of Management (1997). B.A., Dickinson College, 1980; M.B.A., Cornell University, 1985; Ph.D., The Pennsylvania State University, 1999.*

Rosell, Karen J., *Professor of Art* (1986). Lindback Distinguished Teaching Award (1989). Beachley Distinguished Teaching Award (1997). B.A., University of Richmond, 1980; M.A., Virginia Commonwealth University, 1982; Ph.D., Ohio University, 1986.

Russey, William E., *Charles A. Dana Supported Professor of Chemistry* (1966). Beachley Distinguished Teaching Award (1975). B.A., Kalamazoo College, 1961; M.A., Ph.D., Harvard University, 1964, 1966.

Schettler, Paul D., Jr., *Jacob H. and Rachel Brumbaugh Professor of Chemistry* (1967). Beachley Distinguished Teaching Award

(1978). Beachley Distinguished Academic Service Award (1995). B.S., University of Utah, 1958; Ph.D., Yale University, 1964.

Shelley, Russell K., *Assistant Professor in Music and Director of Choral and Vocal Activities* (1991). Junior Faculty Award (1997). B.S., B.S.M., Baptist Bible College, 1985; M.S., Mansfield University, 1986; Ph.D., The Pennsylvania State University, 1997.

Siems, Norman E., *William I. And Zella B. Book Professor of Physics* (1980). Lindback Distinguished Teaching Award (1984). Beachley Distinguished Teaching Award (1994). B.S., Rensselaer Polytechnic Institute, 1966; M.S., The Johns Hopkins University, 1970; Ph.D., Cornell University, 1976.

Sowell, David L., *Associate Professor of History* (1989). Junior Faculty Award (1994). A.B., Western Kentucky University, 1975; B.A., Grand Valley State Colleges, 1976; M.A., Ph.D., University of Florida, 1980, 1986.

Stenson, Catherine A., *Assistant Professor of Mathematics* (2000). Sc.B., Brown University, 1994; M.S., Cornell University, 1997.

Stroman, Duane F., *Professor of Sociology* (1963). Beachley Distinguished Teaching Award (1984). A.B., Ohio Wesleyan University, 1956; S.T.B., Ph.D., Boston University, 1959, 1966.

Sunderland, Benjamin B., *Professor of Mathematics* (1982). B.S., M.A., Ph.D., The Pennsylvania State University, 1970, 1975, 1982.

Thurston-Griswold, Henry, *Professor of Spanish* (1992). B.A., State University of New York at Cortland, 1981; M.A., Ph.D., The University of Texas at Austin, 1983, 1989.

Tuten, Belle S., *Assistant Professor in History* (1997). B.A., College of Charlseton, 1991; M.A., Ph.D., Emory University, 1994, 1997.

Troy, Jack G., *Associate Professor of Art* (1967). B.S., West Chester College, 1961; M.A., Kent State University, 1967.

Wagoner, Paula L., *Assistant Professor of Anthropology* (1997), A.A., Sheridan College, 1988; A.B., Smith College, 1991; M.A., Ph.D., Indiana University, 1995, 1997.

Wang, Xinli, *Assistant Professor of Philosophy* (1999). B.S., Changchun Institute of Geology, China 1982; M.A., Huazhong University, 1988; Ph.D., University of Connecticut, 1999.

Washburn, Robert H., *Professor of Geology* (1966). B.S., M.S., University of Nebraska, 1959, 1961; Ph.D., Columbia University, 1966.

Weaver, Patricia C., *Professor of Economics and Business Administration* (1986). Beachley Award for Distinguished Teaching (2000). B.A., M.A., M.S., The Pennsylvania State University, 1963, 1965, 1991; C.P.A. in Pennsylvania.

Weimer, Donna S., *Professor of Communication* (1990). Lindback Distinguished Teaching Award (1993). B.A., M.A., Ph.D., The Pennsylvania State University, 1974, 1983, 1990.

White, James D., *Associate Professor of Physics* (1998). B.A., Carleton College, 1985; M.Ed., Ph.D., The Pennsylvania State University, 1993, 1994.

Widman, David R., *Assisant Professor of Psychology* (1999). B.S., University of Wyoming , 1987; Ph.D., University of Albany, State University of New York, 1992.

Wilce, Alexander G., *Assistant Professor of Mathematics* (1997). B.A., Oberlin College, 1983; Ph.D., University of Massachusetts/ Amherst. 1989.

Wiinamaki, Lizabeth A., *Assistant Professor of Criminal Justice and Social Work* (1997). B.S., University of Wisconsin-Menomonie, 1976; M.S.W., University of Oklahoma-Norman, 1994; Ph.D., University of Tennessee-Knoxville, 1997.

Wright, Dale E., *Professor of Psychology* (1969). A.B., Chico State College, 1959; B.D., Berkeley Baptist Divinity School, 1962; Ph.D., University of Vermont, 1970.

Woodling, Julie, *Instructional Librarian* (2000). B.S., Lock Haven University, 1992; M.L.S., University of Pittsburgh, 1998.

VISITING & ADJUNCT FACULTY

Anton, Americo B., *Medical Director of the School of Medical Technology and Chair, Department of Laboratory Services Altoona Hospital,* Pre-Medicine Degree, National University of Trujillo, Peru; M.D., National University of Trujillo, School of Medicine, Peru.

Auerbach, Herbert, *Medical Director Medical Technology Program, Abington Memorial Hospital,* B.A., Boston University; D.O.,

Philadelphia College of Osteopathic Medicine.

Eastman James T., *Medical Director of Lancaster Institute for Health Education,* M.D., University of Cincinnati College of Medicine.

Gladfelter, Nadine E., *Medical Technology Program Director at Lancaster Institute for Health Education,* M.S., Temple University.

Noel, Joseph, *Medical Technology Program Director Altoona Hospital,* B.S., MT (ASCP), York College.

Scheelje, Barbara J., *Medical Technology Program Director Abington Memorial Hospital,* B.S., MT (ASCP), Colby-Sawyer College.

Town, Margaret Gray, *J. Omar Good Visiting Distinguished Professor of Evangelical Christianity* (1999). B.S., M.s., University of Michigan, 1961, 1962; Princeton Theological Seminary, 1967; Ph.D., Montana State University, 1995.

Traverse, Alfred, *Adjunct Professor of Biogeology* (1988). S.B., A.M., Ph.D., Harvard University, 1946, 1948, 1951; M.Div., Episcopal Seminary of the Southwest, 1965.

ADMINISTRATION

Office of the President

Kepple, Thomas R. Jr., B.A., M.B.A., Ed.D., *President*

Park, Joanne M., *Administrative Assistant to the President*

Clarke, Cynthia G., B.S., *Institutional Research Specialist*

Student Development

Academic Affairs

Lakso, James J., B.A., M.A., Ph.D., *Provost and Vice-President for Student Development*

Krugh, Joanne L., *Assistant to the Provost and Vice President for Student Development*

+Bassler, Donna J., *Molecular Biology Technician*

Beckenbaugh, Paula C., B.S., M.Ed., *Director of Clinical Experiences*

Bichel, Anthony R., B.A., M.A., Ph.D., *Director of Teaching and Learning Technology*

Blazina, William M. Jr., B.S., *Instrument Technician*

Breene, Christine L., B.A., *Co-Director of the Early Childhood Education Center*

Carney, Nathaniel R., Instructor of IEP and Spanish

+Clarkson, Sarah May, B.A., *Director of Academic Support Services.*

Depetro, George, B.S., M.Ed., *Instructional Systems Developer/Trainer*

Dudash, Andrew M., M.L.I.S., B.A., *Public Services Librarian*

Frederick, Athena D., B.A., *College Registrar*

Fitzsimmons, Tara L., Chemisty Van Driver/Tecaher

Ingerman, Prudence, CTEFL, *Instructor, Intensive English Program*

McDowell, Sylvia P., M.Ed., *Co-Director of the Early Childhood Education Center*

Mumford, John W., B.S., M.A., M.L.S., *Library Director and Head Soccer Coach*

Nagle, Roy D., B.S., M.S., *Brumbaugh Science Center Manager*

Patton, Jenell J., B.A., M.S., *Job Location Development Coordinator, Community Service Coordinator and J. Omar Good Protestant Campus Minister*

Polte, Jarmila A., B.A. *Student Advisor in International Programs.* Lucy M. Calhoun Administrator Award (1995).

Peters, Carol A., *Director of Writing Center*

Rinehart, Yanping T., B.S., M.S., *Biology Department Technician*

Siegel, Nancy J., Ph.D., *Curator, Worth B. Stottlemyer Collection*

Smolcic, Elizabeth A., B.A., M.S., *Director, Intensive English Program*

Sowell, M. Christine, *Science Outreach Project Budget Officer*

Wallace, JoAnn deArmas, B.A., M.S., *Dean of International Programs*

White, Leslie A., *Science Outreach Project Mobile Teacher*

Yohn, Charles E., B.S., M.A. *Director of the Raystown Field Station*

Student Services

Clarkson, Kris R., B.A., M.S., *Dean of Students*

Flaherty, Sharon L., *Dean of Students Office Assistant*

Berrier, William F., B.A., *Head Baseball Coach and Director of Intramurals,* Lucy M. Calhoun Administrator Award (1994)

+ part-time

Bock, Lawrence R., B.S., *Athletic Director and Head Women's Volleyball Coach*

Burke, Kevin P., MALS., B.A., *Head Football Coach*

Buxbaum, Amy M., B.S., J.D., *Head Women's Basketball Coach and Senior Women's Administrator*

Collins, Kathleen M., B.A., M.S., *Director of Residential Life and Swimming Coach*

Cook-Huffman, Daniel J., B.A., M.A., *Assistant Dean of Students*

Cutright, Jon D., B.S., M.S., *Head Track and Men's and Women's Cross Country Coach*

Ferry, Richard E., B.S., M.B.A., *Assistant Athletic Director and Head Men's Basketball Coach*

Gillich, Caroline M., B.S., *Head Field Hockey Coach*

Kysor, Darwin V., B.A., M.A., Ph.D., *Director of Career Services*

Launtz, Timothy R., *Defensive Coordinator*

Panosetti, Rocco, Jr., *Director of Campus Safety and Security*

Patton, Ryan E., B.S., *Head Men's/Assistant Women's Volleyball Coach*

Scialabba, Dawn M., B.S., M.S., *Director of Campus Activities*

Williams, Brook A., *Football Intern*

Witkovsky, L. David., B.S., *College Chaplain*

Athletic Department Coaches & Advisors

Director of Athletics, **Larence R. Bock**

Baseball, *Head,* **William F. Berrier;** *Assistants,* **+George E. Kensinger, Timothy Launtz, +George Zanic**

Basketball (men's), **Rick Ferry;** *Assistants,* **+A. Keith Black**

Basketball (women's), **Amy M. Buxbaum** *Assistant,* **+Kathleen Ziga, +Rachelle Hopsicker**

Cross Country, **Jon D. Cutright**

Field Hockey, *Head,* **Carolyn Gillich;** *Assistants,* **+Diane Sinkus, +Lisa Voigt**

Football, *Head,* **Kevin P. Burke;** *Assistants,* **+Stephen E. Lach, +John H. Boyer, +Stephen L. Hayes, +Allen C. Muir, +Douglas B. Smith, Timothy R. Launtz, +David Wagner;** *Intern,* **Brook A. Williams**

Soccer Coordinator: **Scott McKenzie**

Soccer (men's), **John W. Mumford;** *Assistant,* **Klaus Jaeger**

Soccer (women's), *Assistant,* **Rachelle Hopsicker**

Softball, **+Kathleen Ziga,** *Assistant,* **Carolyn Gillich**

Swimming (women's), **Kathleen M. Collins**

Tennis (women's), **+E. Ann Houck;** *Assistant,* **John Houck**

Track (men's and women's), *Head,* **Jon D. Cutright;** *Assistant,* **+John Boyer, +Christopher Byland**

Volleyball (women's), *Head,* **Lawrence R. Bock;** *Assistant,* **Ryan E. Patton, +Heather Pavlik**

Volleyball (men's), *Head,* **+Ryan E. Patton,** *Assistant,* **Heather Pavlik**

Other

Cheerleading, **+Sheri Border**

Intramural, *Director,* **Bill Berrier**

Judo, **+Jan Finkbinder**

Men's Lacrosse, **Michael Byron**

Scuba, **TBA**

Skeet, **TBA**

Sports Medicine Physicians, **+Frederick L. Jones, +Winfried Berger, +Kenneth D'Amato**

Trainer, **Jeff Leydig**

COLLEGE ADVANCEMENT

Hille, John S., *Vice President for College Advancement and Marketing*

Musselman, Patricia G., *Assistant to the V.P. for College Advancement*

Ahern, Chad, B.A., *Admissions Counselor*

Bartol, Michelle M., B.S., *Dean of Enrollment Management,* Lucy M. Calhoun Administrator Award (1996)

Basom, Brett J., B.S., *Senior Associate Director of Admissions*

Bollman, Terri L., B.S., *Senior Associate Director of Admissions*

Brown, Rosann, B.A., *Publications Coordinator/Graphics Designer*

Carles, Valerie D., *Associate Director of Student Financial Planning*

Corby, Michelle E., *Assistant Director of Alumni Relations*

Engle, Joan I., B.S., *Director of Development Research and Operations*

Foran, Connaire, B.S., *Enrollment Counselor*

Gildea, David A., B.A., M.A., *Director of External Relations and Marketing*

Gliem, Valerie M., B.A., *Director of Media Relations*

Hartman, Marsha Frye, B.S., M.Ed., *Director of the Juniata Fund*

Herzog, Chad., B.A., *Assistant Director of Major Gifts*

Hull, Ann M., *Assistant Director of Major Gifts*

Ketrick, Melissa J., *Admission Counselor*

Kitchen, Kim, B.A., *Assistant Director of Planned Giving*

Meadows, David D., B.A., *Admission Counselor*

O'Brien, Bridget, B.S., *Assistant Director of Alumni Relations*

O'Dellick, Lisa R., *Advancement Systems Specialist*

Parker, Melvin E. III, B.A., *Sports Information Director*

Porfeli, Denise, B.S., *Assistant Director of the Juniata Fund*

Rennell, Randall S., B.A., M.A., *Director of Student Financial Planning*

Wiedemer, Lisa L., *Assistant Director of Development–Foundations & Corporations*

Wyrick, Ronald E., B.A., M.Div., D.Min., *Associate Vice President for College Advancement and Marketing, Development and Gift Planning*

BUSINESS AFFAIRS

Alexander, William R., B.S., M.A., *Vice President for Finance and Operations*

Gracey, Carole M., *Assistant to the Vice President for Finance and Operations*

Butler, Terry L., *Custodial Supervisor*

delGuidice, Tristan S., *Director of Facilities Services*

Hissner, Deborah K., *Director of End User Support Services*

Hughes, Barbara J., B.A., M.S., A.M., *Director of Administrative Information Services*

Langenbacher, Mark E., *Grounds and Central Boilers Supervisor*

Manion, Arthur A., B.S., QBA, *Director of Network Infrastructure*

Martin, Earl N., *Assistant Director of Facilities Services*

Mickel, Jason T., B.S., *Senior Programmer Analyst*

Thompson, Philip G., B.S., CPA, *Controller*

Ulrich, Gail Leiby, B.A., *Director of Human Resources*

Wood, Anne M., B.S., *Server/Security Analyst*

CAMPUS MINISTRY

Witkovsky, L. David, B.S., M. Div., *College Chaplain*

EMERITI BOARD, FACULTY & ADMINISTRATION

Board of Trustees

Date in parentheses is that of appointment to the board.

Cruser, George E. '52, B.S., New Hope, PA (1982-86) (1991)

Detwiler, Dale W., LL.D., Huntingdon, PA (1949)

Groff, Warren F. '49, B.A., B.D., Ph.D., D.D., Oak Brook, IL (1976)

Knox, Charles R. '54, B.S., LL.D, Villa Park, CA (1978)

Long, W. Newton, Jr. '40, B.S., M.D., Flowery Branch, GA (1976)

Maxwell, LeRoy S. '36, B.A., J.D., Waynesboro, PA (1961-64, 1972-81)

Patterson, Wayne C. '60, B.S., M.S., Ph.D., Parker, CO (1986)

Pearson, Charles C., Jr., B.S.E., M.B.A., State College, PA (1994)

Pote, Garry L. '68, B.A., M.B.A., Huntingdon, PA (1981)

Sarni, Vincent A., Sr., B.S., LL.D., Pittsburgh, PA (1979)

Faculty

Date in parentheses is that of emeritus status.

Baxter, Craig, *Professor of Politics and History, Emeritus* (1997). B.S., A.M., PhD., University of Pennsylvania, 1951, 1954, 1967.

Blaisdell, B. Edwin, *Professor of Mathematics, Emeritus* (1976). B.S., Ph.D., Massachusetts Institute of Technology, 1932, 1935.

Bowser, John D., *Associate Professor of Mathematics*, Emeritus (1997). B.S., Juniata College, 1957; M.S., West Virgina University, 1959; Ph.D., Pennsylvania State University, 1976.

Briggs, Clayton E., Associate *Professor of Speech and Theatre, Emeritus* (1990). A.B., University of Maine, 1949; A.M., Whittier College, 1952.

Cherry, Elizabeth A. Ellis, *Professor of History, Emerita* (1998). Beachley Distinguished Academic Service Award (1990). Beachly Distinguished Teaching Award (1998). A.B., College of Wooster, 1956; A.M., Columbia University, 1957.

Church, Evelyn H., *Assistant Professor of Spanish, Emerita* (1991). A.B., Wake Forest College, 1949; M.A., Middlebury College, 1970.

Church, Ralph B., *Professor of English, Emeritus* (1991). A.B., Wake Forest College, 1949; M.A., Columbia University, 1951.

Crouch, Howard H., *Martin G. Brumbaugh Professor of Education, Emeritus* (1989). B.S., The Ohio State University, 1949; Ed.M., Westminster College, 1953; Ph.D., The Ohio State University, 1964.

Dolnikowski, George T., *Professor of Russian and German Emeritus* (1988). A.B., Juniata College, 1952; A.M., University of Pennsylvania, 1954; A.M., Harvard University, 1986.

Doyle, Esther M., *Charles A. Dana Supported Professor of English, Emerita* (1975). B.L.I., Emerson College, 1935; A.M., Boston University, 1940; Ph.D., Northwestern University, 1964.

Duey, William E., *Assistant Professor of Economics and Business Administration and Registrar, Emeritus* (2000). B.S., The Pennsylvania State University, 1959; MBA, The George Washington University, 1970; M.A., Shippensburg University, 1986.

Fisher, Robert L., *Professor of Biology, Emeritus (1997).* Beachley Distinguished Academic Service Award (1994). A.B., San Jose State College, 1958; Ph.D., Cornell University, 1968.

Goehring, Doris, *Assistant Professor of Speech and Theatre Emerita* (1990) A.B., University of Pittsburgh, 1947; A.M., Columbia University, 1950.

Gooch, James L., *Professor of Biology, Emeritus* (2000). Beachley Distinguished Teaching Award (1982). B.S., M.S., West Virginia University, 1960, 1967, Ph.D., University of Delaware, 1968.

Hartzler, Eva R., *Charles A. Dana Supported Professor of Chemistry, Emerita* (1976). B.S., Juniata College, 1932; M.S., Ph.D., The Pennsylvania State University, 1933, 1950.

Heberling, Paul M., *Professor of Anthropology, Emeritus* (1989). A.B., M.S., The Pennsylvania State University, 1948, 1950.

Heller, Bernice Engman, *Associate Professor of Spanish, Emerita* (1997). A.B., College of Wooster, 1953; A.M., University of Kansas, 1955.

Heller, Max N., *Associate Professor of Mathematics and Computer Science, Emeritus (1997).* B.S., M.S., The Pennsylvania State University, 1958, 1976; M.A.T., Indiana University, 1967.

Hofelt, William L., Jr., *Associate Professor of English, Emeritus* (1997). Beachley Distinguished Teaching Award (1996) B.A., Juniata College, 1965; M.A., University of Rochester, 1967.

Kaminsky, Edward F., *Professor of Economics and Business Administration, Emeritus* (1997). B.S., King's College, 1996; M.B.A., Wilkes College, 1973; C.P.A. in Pennsylvania.

Kaylor, Earl C., Jr., *Charles A. Dana Supported Professor of History, Emeritus* (1991). A.B., Juniata College, 1946; B.D., Bethany Theological Seminary, 1949; A.M., University of Notre Dame, 1951; Ph.D., The Pennsylvania State University, 1963.

Linton, Mary Ruth Myers, *Professor of Music, Emerita* (1989). A.B., Juniata College, 1938; A.M., Eastman School of Music, 1939.

Masters, Henry G., *Associate Professor of Psychology, Emeritus* (1999). B.A., University of Rochester, 1958; M.A., Emory University, 1961; Ph.D., The Kansas State University, 1968.

Musselman, Miriam A. Schlegel, *Professor of Education, Emerita* (1975). B.S., Shippensburg State College, 1938; M.S., University of Pennsylvania, 1950; Ed.D., George Peabody College for Teachers, 1962.

Nolan, Thomas J., *Professor of Economics, Emeritus* (1997). A.B., King's College, 1951; A.M., The Pennsylvania State University, 1953.

Norris, Wilfred G., *William I. And Zella B. Book Professor of Physics, Emeritus* (1998). Beachley Distinguished Academic Service Award (1993). B.S., Juniata College, 1954; Ph.D., Harvard University, 1963.

Pfrogner, Ray L., *Associate Professor of Physics, Emeritus* (1998). B.S., Juniata College, 1960; M.S., Ph.D., University of Delaware, 1964, 1971.

Post, Ernest H., *W. Newton and Hazel A. Long Professor of History, Emeritus* (1989). A.B., Hope College, 1948; A.M., Ph.D., Michigan State University, 1952, 1966.

Rockwell, Kenneth H., *Professor of Biology, Emeritus* (2000). Beachley Distinguished Teaching Award (1979). B.S., Juniata College, 1957; M.S., Brown University, 1960; Ph.D., The Pennsylvania State University, 1967.

Trexler, J. Peter, *Professor of Geology, Emeritus* (1989). A.B., M.S., Lehigh University, 1950, 1953; Ph.D., The University of Michigan, 1964.

Wagoner, Robert E., *Professor of Philosophy, Emeritus* (2000). Beachley Distinguished Teaching Award (1988). B.S., Manchester College, 1952; Ph.D., Harvard University 1968.

Wampler, Dale L., *Professor of Computer Science, Emeritus* (1999). Beachley Distinguished Academic Service Award (1981). A.B., Bridgewater College, 1957; Ph.D., University of Wisconsin, 1962.

Woodrow, Thomas W., *Martin G. Brumbaugh Professor of Education, Emeritus* (1997). Beachley Distinguished Academic Service Award (1992). B.S., Juniata College, 1958; M.Ed., Indiana University of Pennsylvania, 1966; D.Ed., The Pennsylvania State University, 1976.

Zimmerer, Robert P., *Charles A. Dana Supported Professor of Biology, Emeritus* (1993). B.S., University of Wisconsin, 1954; M.S., Cornell University, 1961; Ph.D., The Pennsylvania State University, 1966.

Administration

Date in parentheses is that of emeritus status.

Binder, Frederick M., *President and Professor of History, Emeritus* (1986). A.B., Ursinus College, 1942; M.A., Ph.D., University of Pennsylvania, 1948, 1955; LL.D., Ursinus College, 1960; Litt.D., Wagner College, 1964; L.H.D., Rider College, 1966; Pd.D., Susquehanna University, 1969.

Neff, Robert W., *President, Emeritus* (1998). B.S., The Pennsylvania State University, 1958; B.D., M.A., Ph.D., Yale University, 1961, 1964, 1969; D.D., Juniata College, Manchester College, 1979; L.H.D., Bridgewater College, 1979.

STAFF & DEPARTMENTAL ASSISTANTS

+Bessler, Donna, *Molecular Biology Technician*

Best, Christine Y., *Enrollment Assistant*

Brechbiel, Linda M., *Benefits Coordinator,* Oneida Hall

Bumbarger, Heather A., *Help Desk Coordinator,* Brumbaugh Science Center, Anna Groninger Smith Supporting Staff Award (1992)

Catanese, Amy L., *Office Services Supervisor,* Oneida Hall

Chamberlain, Patricia K., *Enrollment Assistant,* William E. Swigart, Jr. Center

Confer, Violet M., *The Juniata Fund Assistant,* Founders Hall

Conway, James R., *Security Officer,* Ellis Hall

Feagley, Gary L., *Audio Visual Technician,* Good Hall

Fleegal, Lee H., *Security Officer,* Ellis College Center

Fortney, Jack I., *Security Officer,* Ellis College Center

Garlock, Melissa J., *Accounts Payable Assistant,* Oneida Hall

+Gaudlip, Terry K., *Science Outreach Project*

Gilsbach, Patricia A., *International Programs Assistant,* Oller Center for Peace and International Programs

Glenny, Susan G., *Post Office Supervisor,* Ellis College Center

Grove, Donna J., *Library Office Assistant,* L.A. Beeghly Library

Hawn, Audene L., *Ellis College Center Assistant,* Ellis College Center, Anna Groninger Smith Supporting Staff Award (1991)

Hess, Pamella L., *Enrollment Assistant,* William E. Swigart Jr. Center

Hooper-Conway, Penny D., *Residential Life and Campus Activities Office Assistant,* Ellis College Center

Hughes, Timothy J., *Security Officer,* Ellis College Center

Isenberg, JoAnn, *Development Travel Coordinator,* Founders Hall

Jennings, Norma S., *Enrollment Assistant,* William E. Swigart Jr. Center.

Jones, Lynn B., *Library Circulation Supervisor,* L.A. Beeghly Library, Anna Groninger Smith Supporting Staff Award (1990)

Kauffman, C. Sue, *Payroll Assistant,* Oneida Hall

LaVere, Susan A., *Health Professions Program Assistant and Faculty Secretary,* Brumbaugh Science Center

Lightner, Patricia L., *Library Cataloging Assistant,* L.A. Beeghly Library

Lightner, Wanda J., *Physical Plant Secretary,* Physical Plant

Lucas, Renee M., *Academic Support Secretary and J. Omar Good Secretary,* Founders Hall

MacEachern, Christine C., *Registrar's Assistant,* Founders Hall

McChesney, Margaret L., *Academic Records Assistant,* Founders Hall

McClain, Donald L., *Development Information Services Assistant,* Founders Hall

McIlroy, Betty J., *Customer Service Representative,* Oneida Hall

McLaughlin, Edward F., *NSF Delivery Person*

+Miles, Michaels S., *Security Officer*

Morgan, Pamela K., *Development Accounting Clerk,* Founders Hall

Nabozny, Anthony J., *Athletic Equipment Supervisor,* Kennedy Sports+Recreation Center.

+Nichol, Patricia A., *Office Services Clerk,* Oneida Hall

Painter, William C., *PC Technician,* Brumbaugh Science Center

Panosetti, Carla J., *Security Officer and Office Assistant,* Ellis College Center

Patrick, Tracie M., *Accounts Receivable Collection/Loan Specialist,* Oneida Hall

Pembrooke, Evelyn L., *Alumni Relations Assistant,* H. B. Brumbaugh Alumni House

Pierotti, Susan Y., *Natural Sciences Faculty Secretary,* Brumbaugh Science Center

Powell, Shirley A., *Career Services Assistant,* Ellis College Center, Anna Groninger Smith Supporting Staff Award (1991)

Price, Larry A., *Communications Technician,* Brumbaugh Science Center

Reck, Barbara A., *Purchasing Assistant,* Oneida Hall, Anna Groninger Smith Supporting Staff Award (1996)

Rhodes, Carrie, *Scheduling Assistant,* Founders Hall

Rhodes, Lacey A., *Social Sciences Faculty Secretary,* Good Hall

Roll, Brenda R., *External Relations and Marketing Assistant,* H. B. Brumbaugh Alumni House

Ross, Diane S., *Enrollment Assistant,* William E. Swigart, Jr. Center

Shontz, Susan F., *Accounting Services Assistant,* Oneida Hall

Simpson, Beverly A., *Business Services Assistant,* Oneida Hall

Sloan, Permilla, *Athletic Department Secretary,* Kennedy Sport + Recreation Center

Stapleton, Kay M., *Provost Office Secretary,* Founders Hall

Steele, Donald C., *Security Officer,* Ellis College Center

+Waddle, Nancy M., *Financial Aid Assistant,* William E. Swigart Jr. Center

+Widman, Elizabeth G., *Baker Institute Office Secretary,* Oller Center

Williams, Barbara, *Humanities Faculty Secretary,* Humanities Building

+Woods, Cheryl, *Accounting Office Clerk,* Oneida Hall

Yocum, Bethany K., *Library Acquisitions Clerk,* L.A. Beeghly Library

Zauzig, Belinda S., *Athletic Department Assistant,* Kennedy Sports+Recreation Center

+ part-time

GLOSSARY OF SELECTED ACRONYMS

ACT - American College Test
BCA – Brethren Colleges Abroad
BSC - Brumbaugh Science Center
CAACURH – Central Atlantic Association of College & University Residence Halls
CAPE – A consortium of 26 PA colleges to be linked by interactive video conferencing
CBE – Credit by Examination
CCT – Co-Curricular Transcript
FAFSA – Free Application for Federal Student Aid
FFEL – Federal Family Educational Loan program
FLED – Foreign Language/Education Laboratory
FND - Founders Hall
HUM - Humanities Building
IB – International Baccalaureate
IDEA – Instituto de Estudios Avanzados de Oriente
IDF - Institutional Data Form
IEL – Institute for Experiential Learning
IEP – Intensive English Program
IHB - I. Harvey Brumbaugh House
IIE – Institute for International Education
IN-POE – Initial Program of Emphasis
IPO – International Programs Office
JAB – Juniata Activities Board
JCE - Juniata College Exchange program
JYAL – Junior Yeas Abroad at the University of Leeds
LSAT – Law School Admissions Test
MAC – Middle Atlantic States Collegiate Athletic Conference
NACURH – National Association of College & University Residence Halls
NASFA – National Association of Student Financial Aid Administrators
NCUR – National Conference on Undergraduate Research
OC - Oller Center
OPTIONS – A university outreach program on international security
PACE – Program at Thomas Jefferson University
PaCIE – The Pennsylvania Council for International Education
PAR – Program for Area Residents
PHEAA - Pennsylvania Higher Education Assistance Agency
POE – Program of Emphasis
QH - Quinter House
RA – Resident Assistant
RD – Resident Director
RHA – Residence Hall Association
SAT - Scholastic Assessment Test
ST - Special Topics course
TESOL – Teachers of English to Speakers of Other Languages
TLT – Teaching-Learning Technology center
TOEFL – Test of English as a Foreign Language

INDEX

Absence, Leaves of 46
Academic integrity 46
Academic policies 42
Academic programs 17
Academic standards of progress 49
Academic support 40
Accounting 87
Accreditation 10
Activities, Campus 53
Administration 185
Admission guidelines 64
Advanced placement credit 45
Advising 39
Allied health 22, 26
Alcohol 60
Anthropology 163
Application fee 66
Athletic coaches 186
Athletics 55
Auditing courses 43

Banking services 58
Bills, Payment of 80
Biology 96
Board of Trustees 180
Brethren Colleges Abroad 29
Buckley Amendment 46
Budgets, Education 75
Business 86

Calendar, Academic 4
Campus Ministry 53
Campus Visit 65
Career services 58
Certification, Teacher 24
Chemistry 101
Classification, Student 44
Clubs 54
College History 8
Co-curricular activities 53
Co-curricular transcript 53
Communication 115
Communication organizations 54
Computer Science 131
Conditional admission 67
Cooperative programs 24
Core curriculum 18
Correspondence directory 2-3
Counseling services 57
Course descriptions 84-177
Course load 42
Credit by Examination 43
Credential fees 79
Cultural events 55
Curriculum 18

Dean's List 50
Deferred Admission 68
Degree Requirements (see Curriculum) 18
Dentistry, cooperative program in 25
Deposits 80
Dining services 58
Drop/Add period 42
Drugs 60

Early Admission 68
Earth Science (see Geology) 121
Economics 88
Education 107
Emeriti Faculty and Administration 188, 189
Employment, Campus 74
Engineering (see also Physics and Mathematics) 26
English 113
English as a Second Language 31, 170
Environmental Sciences & Studies 118
Environmental Studies Field Station 15
Expenses, Students 78

Facilities, General 13
Faculty 181
Family Educational Rights and Privacy Act 46
Fees 78
Finances, Student 73
Financial Planning 73
Fine Arts 91
Firearms 60
Food service 58
Foreign Languages 168
Free Applicaton for Federal Student Aid 76
French 170
Freshman Admission 64
Freshman Orientation 55
Full-time status 44

Geology 121
German 172
Grade Appeals 48
Grades 47
Graduation Checklist 37
Graduation Honors 50
Grants 73

Health Professions 22
Health Services 57
History 134
Home Schooled Students 68
Honors and Awards 50
Honor Societies 50
Housing (See Residence Hall Life) 56

I.D. cards 59
Incomplete Grades 48
Independent Study 43
Information Technology 131
Initial Program of Emphasis 40
Instructional Facilities 13
Instructional Technology 11
Insurance, Medical 57, 79
International Baccalaureate 46
International Programs 27
International Studies 133
International Studies, Certificate in 31
Internships 32
Intramural athletics 55

Juniata College Exchange Program 29

Languages, Foreign 168
Law, cooperative program in 27
Learning disabilities 41
Leave of Absence 46
Library 14
Loans 74

Mail services 58
Marine Program 27
Mathematics 134
Medical Technology 25
Medicine, Pre- 25
Misconduct, Sexual 61
Mission statement 8
Music, course offerings 140, 141

Non-Degree students 69
Non-Departmental courses 143
Non-discrimination, statement on Title Page

Off-Campus housing (see Residence Halls) 15
Optometry, cooperative program in 26
Organizations, student 54
Orientation 55
Overload policy 42

Part-time fees 80
Pathfinder (Student Handbook) 56
Payment of bills 80
Peace and Conflict Studies 144
Peace Chapel 15
Philosophy 147
Physical Therapy 26
Physics 150
Plagiarism (See Academic Integrity) 46
Planning, Student Financial 73
Podiatry, cooperative program in 26
Politics 154
Post Office 58
Pre-Law 27
Pre-Medicine 25
Pre-professional programs 24
Probation, Academic 49
Program for Area Residents (PAR) 70
Program of Emphasis 40
Psychology 158

Radio Station, Student 54
Raystown Env. Studies Field Station 15
Recreation 55
Refund policies 81
Registration 42
Registration deposit 80
Religion 161
Religious life 55
Residence halls 15
Residency policy 45
Room and board fee 81
Russian 173

SATs 65
Scholarships 73
Security 59
Senior Citizens Program 70
Service clubs 53
Sexual harassment 60
Social Work 23, 163
Sociology 163
Spanish 175
Sports, Intercollegiate 55
Sports, Intramural 55
Sports+Recreation Center 14
Spring semester admission 68
Staff and departmental assistants 189
Standards of student conduct 60
Student activities 53
Student development 10
Student employment 74
Student finances 73
Student Government 53
Student handbook (Pathfinder) 56
Student loans 74
Student organizations 54
Study abroad 28
Summer orientation 55
Summer sessions 44

Teaching 24
Technology, Instructional 11
Test of English as a Foreign Language (TOEFL) 69
Theatre Arts 117
Transcripts 47
Transfer admission 66
Transfer credit 67
Trustees, Board of 180
Tuition fee 76
Tuition refunds 81

Veterinary medicine, Pre-Professional 22
Vision, statement on Title Page
Violence 60

Washington Center 34
Washington Semester 34
Withdrawal, Course 48
WKVR-FM 54
Writing (see also Communication) 112

JUNIATA COLLEGE

Juniata College • 1700 Moore Street • Huntingdon, PA 16652
Toll Free: 1-877-JUNIATA • FAX: 814-641-3100
www.juniata.edu